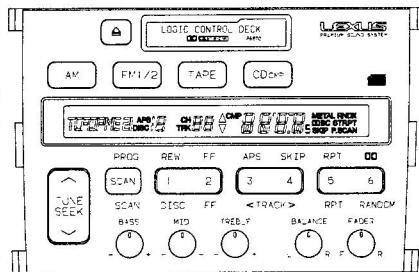


Service Manual



ORDER NO.
CRT1367

HEAD UNIT

KEX-M9161ZT UC

KEX-M9161ZT-91 UC

- These models have been installed in LEXUS SC400 and SC300.

Model	Supplementary Model	Part No.	ID No.
KEX-M9161ZT/UC	KEX-M9161ZT-91/UC	86120-24220	P6800

- Supplementary model is identical to the original model except for the addition of following items.

Carton	CHG1592
Styrofoam (R)	CHP1273
Styrofoam (L)	CHP1274
Cover	CEG-236

- Dolby and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.
- Noise Reduction System manufactured under license from Dolby Laboratories Licensing Corporation.
- See the separate manual CX-156 (CRT-468) for the cassette mechanism description.
- If this equipment is not connected with the satellite switch, it is not possible to turn on and off the power supply for the radio nor adjust the volume. When repairing, be sure to connect the satellite switch jig to this unit.

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PIONEER ELECTRONIC CORPORATION

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FD MAR. 1991 Printed in Japan

1. SPECIFICATIONS

General

Power source 13.2V (10.5 – 16.0V allowable)
 Grounding system Negative type
 Dimensions 183(W) × 125(H) × 175(D)mm
 Weight 2.4kg

Tone Controls

(Bass) ± 10dB (100Hz)
 (Mid) ± 10dB (1kHz)
 (Treble) ± 10dB (10kHz)

Tape player

Tape Compact cassette tape
 (C30 – C90)
 Tape speed 4.76cm/sec.
 (+0.14cm/sec., – 0.05cm/sec.)
 Wow & flutter Less than 0.15% (WRMS)
 Crosstalk More than 40dB
 Stereo separation More than 30dB

Signal-to-noise ratio

Dolby NR OUT More than 40dB
 Dolby NR IN More than 45dB

FM tuner

Frequency range 87.9 – 107.9MHz
 Usable sensitivity 15 ± 6dB μ V
 Signal-to-noise ratio More than 48dB
 Distortion Less than 1.5%
 Stereo separation More than 25dB

AM tuner

Frequency range 530 – 1710kHz
 Usable sensitivity 25 ± 6dB μ V
 Usable selectivity More than 30dB (± 9kHz)
 Signal-to-noise ratio More than 40dB

2. CONNECTOR FUNCTION DESCRIPTION

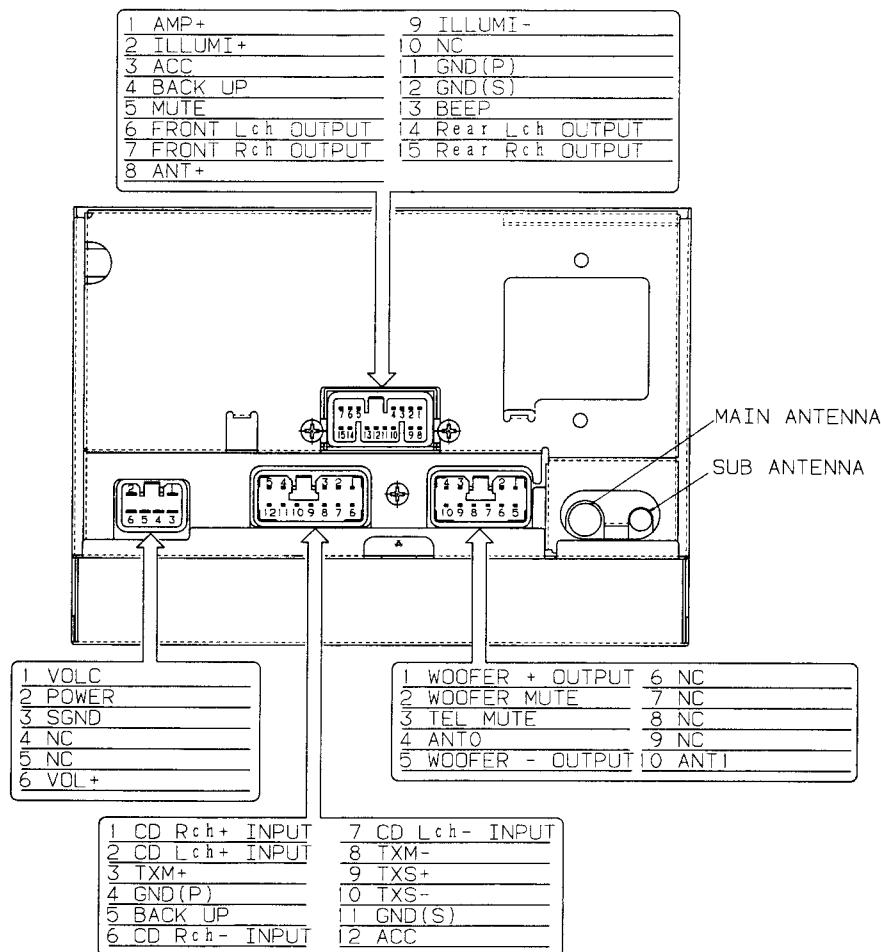


Fig. 1

3. DISASSEMBLY

● Removing the Case (Upper)

1. Insert and turn a tweezers to remove the case.
2. Raise the case to remove.

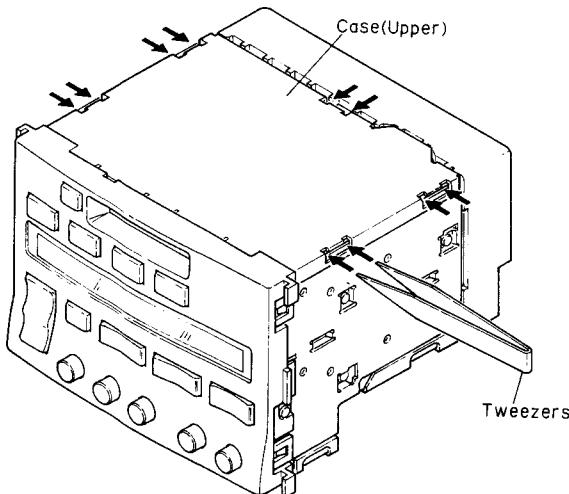


Fig. 2

● Removing the Cassette Mechanism Assy

1. Remove the four screws.
2. Disconnect the connector.
3. Remove the cassette mechanism assy.

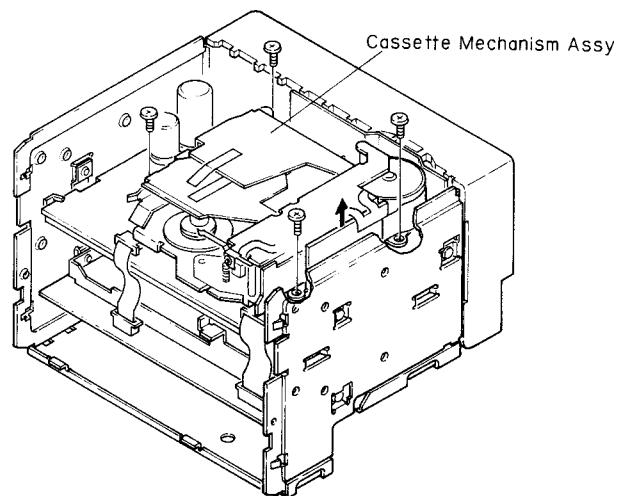


Fig. 4

● Removing the Grille Assy

1. Remove the two screws.
2. Press the tabs at four locations, and then pull out the grille assy.

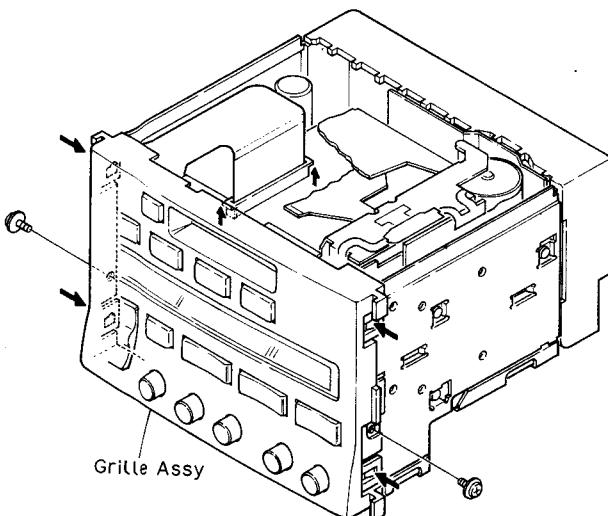


Fig. 3

● Removing the Case (Lower)

1. Insert and turn a tweezers to remove the case.
2. Raise the case to remove.

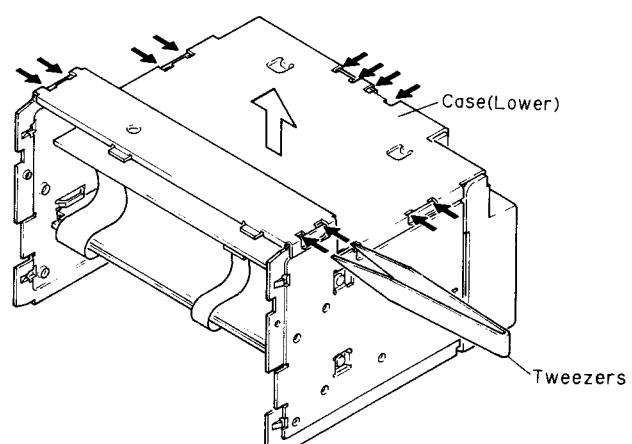


Fig. 5

● Removing the Audio Section

1. Remove the six screws A.
2. Disconnect the two connectors, and then remove the audio section.

● Removing the Control Unit

1. Remove the four screws B.
2. Disconnect the three connectors, and then remove the control unit.

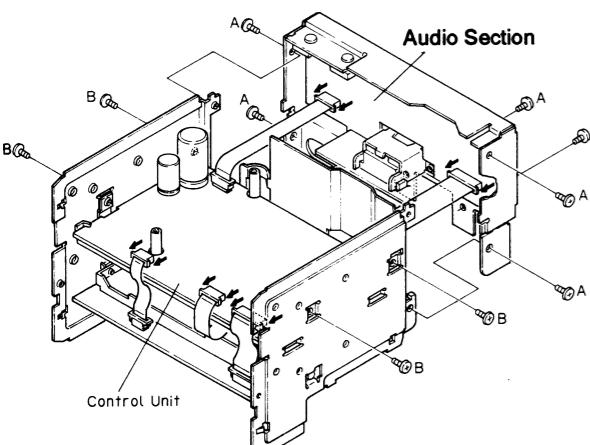


Fig. 6

● Removing the Cover Assy

1. Remove the three screws E and two screws F.
2. Unbend the tab at a location indicated by arrow until straight.
3. Remove the cover assy.

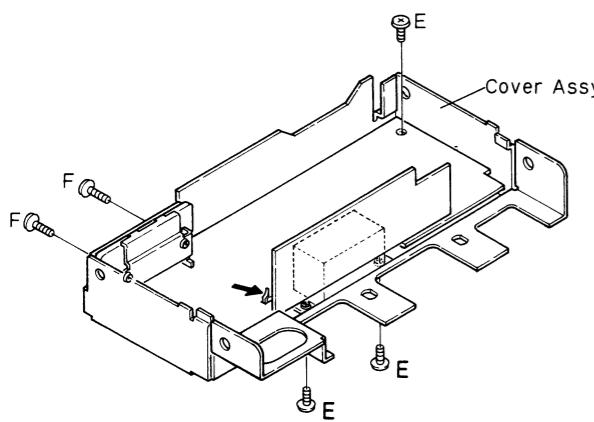


Fig. 7

● Removing the Key Board

1. Remove the nine screws.
2. Disconnect the connector.
3. Remove the key board .

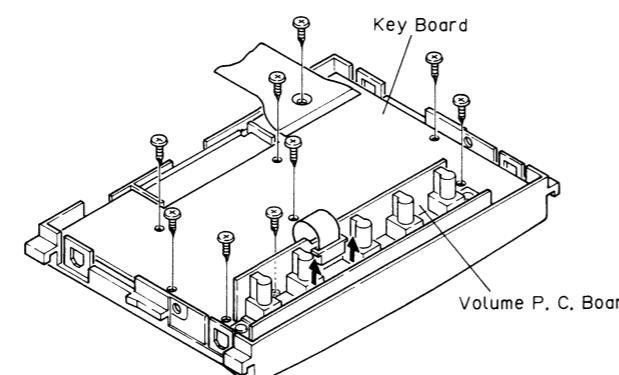


Fig. 8

4. CIRCUIT DESCRIPTION

4.1 CD COMPRESSION

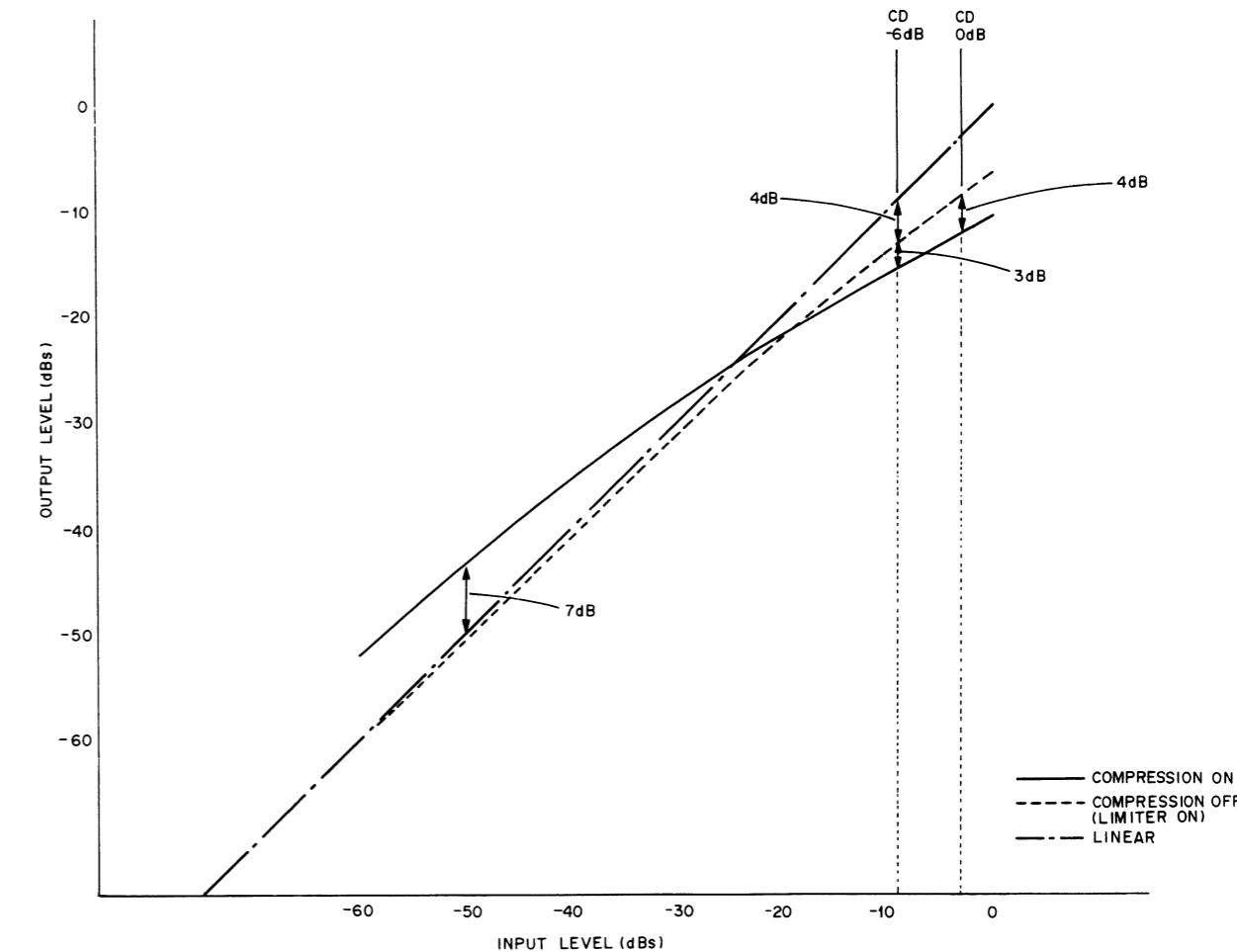


Fig. 10

● Compression "OFF"

Only the high volume portion of the CD (Compact Disc) sound is compressed.

● Compression "ON"

When this function is "ON" it compresses the dynamic range by slightly magnifying the low volume sound and reducing the high volume sound. This is often desirable because a CD with a large dynamic range, such as a classical music CD, tends to make the high volume parts too loud when you adjust the overall volume to make the quieter parts loud enough.

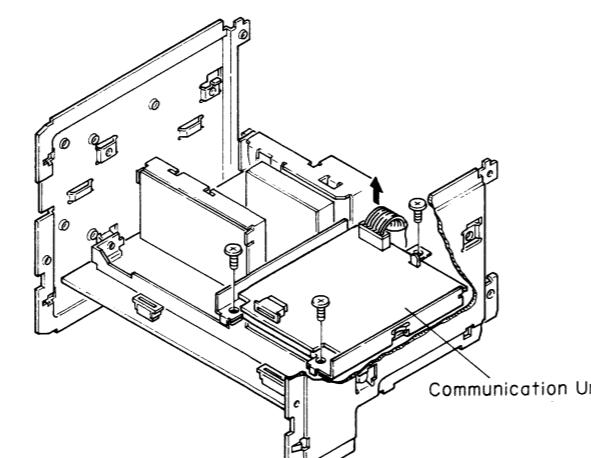


Fig. 9

4.2 BLOCK DIAGRAM

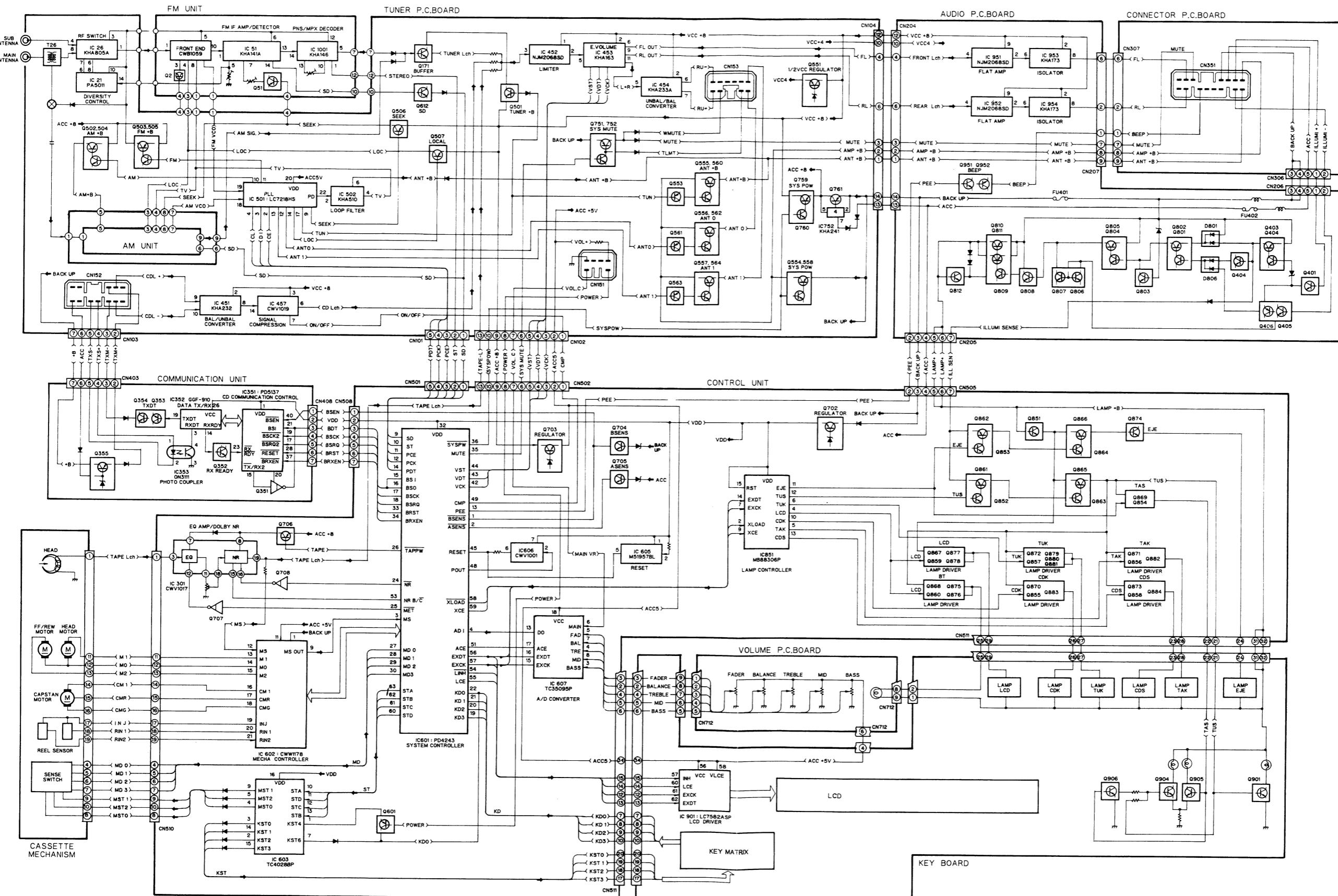


Fig. 11

5. GENERAL GUIDE

5.1 RADIO

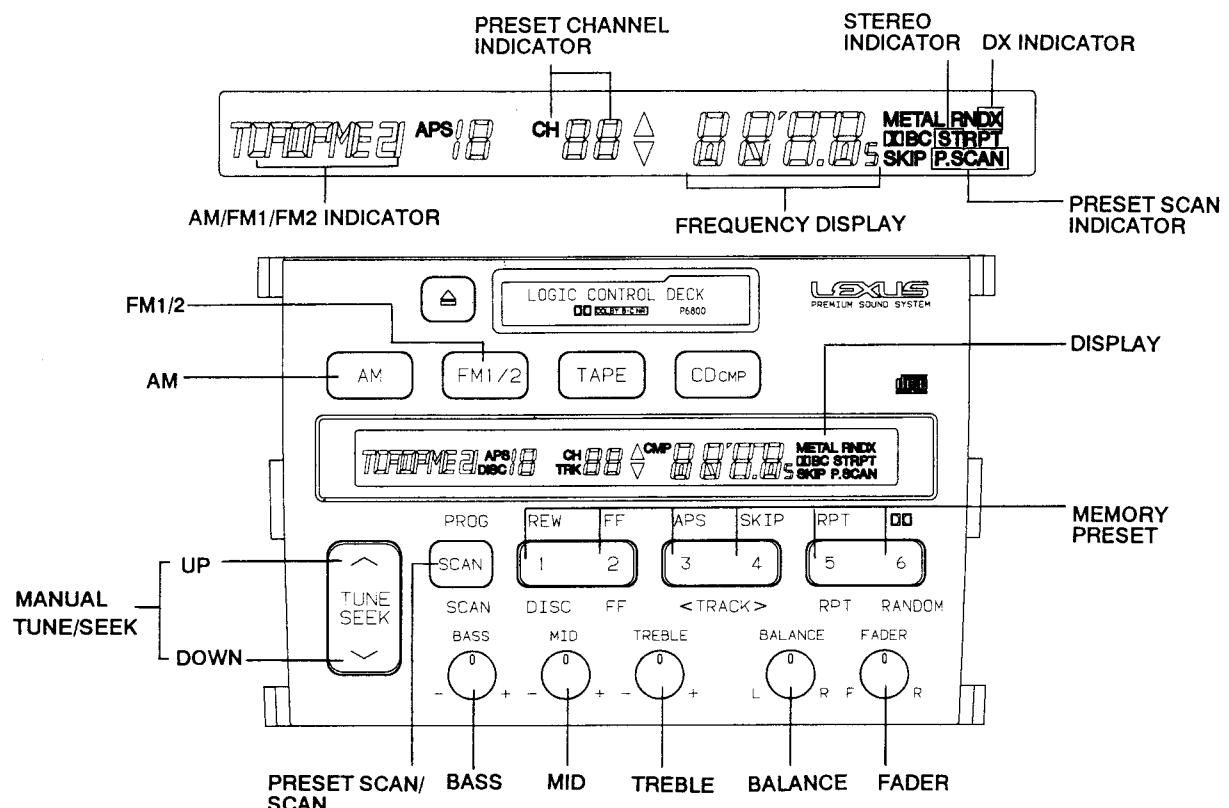


Fig. 12

● Manual/Seek Tuning:

When the \wedge (up) side of the TUNE, SEEK button is pressed, and when the \vee (down) side is pressed, the frequency is decreased in the same way. Holding the button depressed for more than 0.5 seconds starts seek tuning, which stops when a station broadcasting a sufficiently strong signal is received.

When only weak signals or no station is received, the frequency returns to the initial frequency, then the reception is changed to the DX mode.

● Memory Preset:

- (1) Select the required band among the FM1, FM2, and AM bands.
- (2) Tune to the broadcast station required to be stored in memory..
- (3) Press and hold one of the Memory Preset button for more than 2 seconds.

(4) A beep tone will be heard when the tuned station is stored in the memory corresponding to the Memory Preset button pressed.

(5) Up to six stations can be memorized for each of the FM1, FM2 and AM bands.

● Preset Scan/Scan Tuning:

When the SCAN button is pressed, all the stations stored in the Memory Preset buttons will be received for 5 seconds in sequence.

When the SCAN button is held pressed for more than 2 seconds, the Scan Tuning mode is activated and station broadcasting strong signals will be received for 5 seconds in sequence. When the tuning returns to the frequency from which the Scan Tuning was started, the receiving mode is changed to the DX mode.

To release Preset Scan or Scan Tuning, press the SCAN button again.

5.2 TAPE

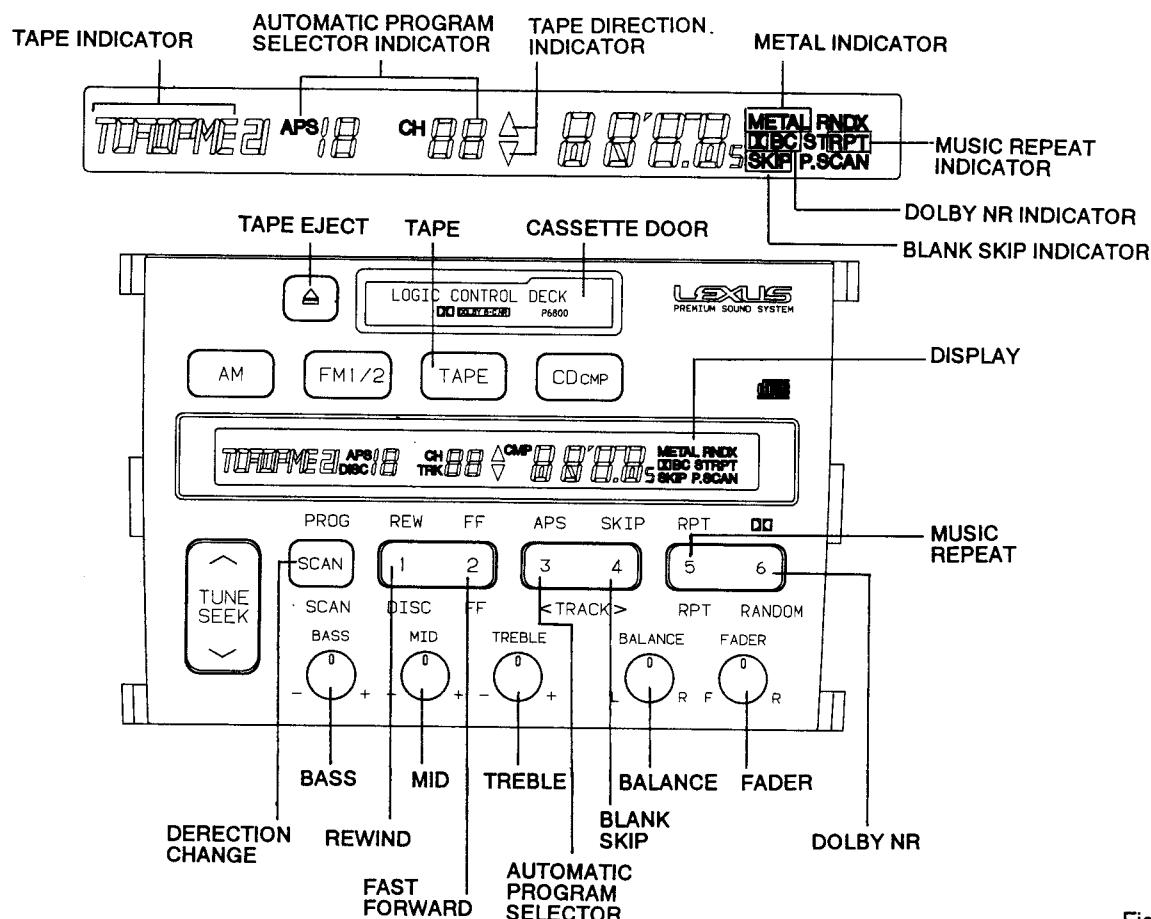


Fig. 13

● Rewind/Fast Forward:

Press the REW (or FF) button to rewind (fast-forward) the tape, and press it again to release the function.

● APS:

With the APS button, the beginning of any required tune up to 9 tunes before and after the current tune can be detected automatically. After pressing the APS button the number of times corresponding to the number of the tune to which you want to skip (for three times to select the 3rd tune), press the FF button to search in the forward direction or press the REW button to search in the reverse direction. The tape will stop at the beginning of the designated tune and play starts automatically.

(For example)

When the FF button is pressed after pressing the APS button three times, the tape is fast-forward by skipping two tunes in the forward direction, and play will start from the beginning of the 3rd tune.

● Blank Skip:

With the SKIP button pressed ON, when a blank (non-

recorded) section of more than 15 seconds is detected, the tape is fast-forwarded to the beginning of the next tune. When the SKIP button is pressed again, the Blank Skip function is released.

● Music Repeat:

With the RPT button pressed ON, when the current tune is finished, the tape will be rewound to the beginning of the tune and play will restart automatically. When the RPT button is pressed again, the Music Repeat function is released.

● **Dolby Noise Reduction***

Press this button when using a tape recorded with the Dolby Noise Reduction system.

Each press of this button shifts the Dolby NR mode as follows :

→ Dolby NR off → Dolby B NR → Dolby C NR

** Noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation.
Dolby and the double-D symbol are trademarks of Dolby*

Laboratories Licensing

• **Ejecting Tape:** The tape can be ejected at any time by pushing the TAPE EJECT button.

5.3 CD

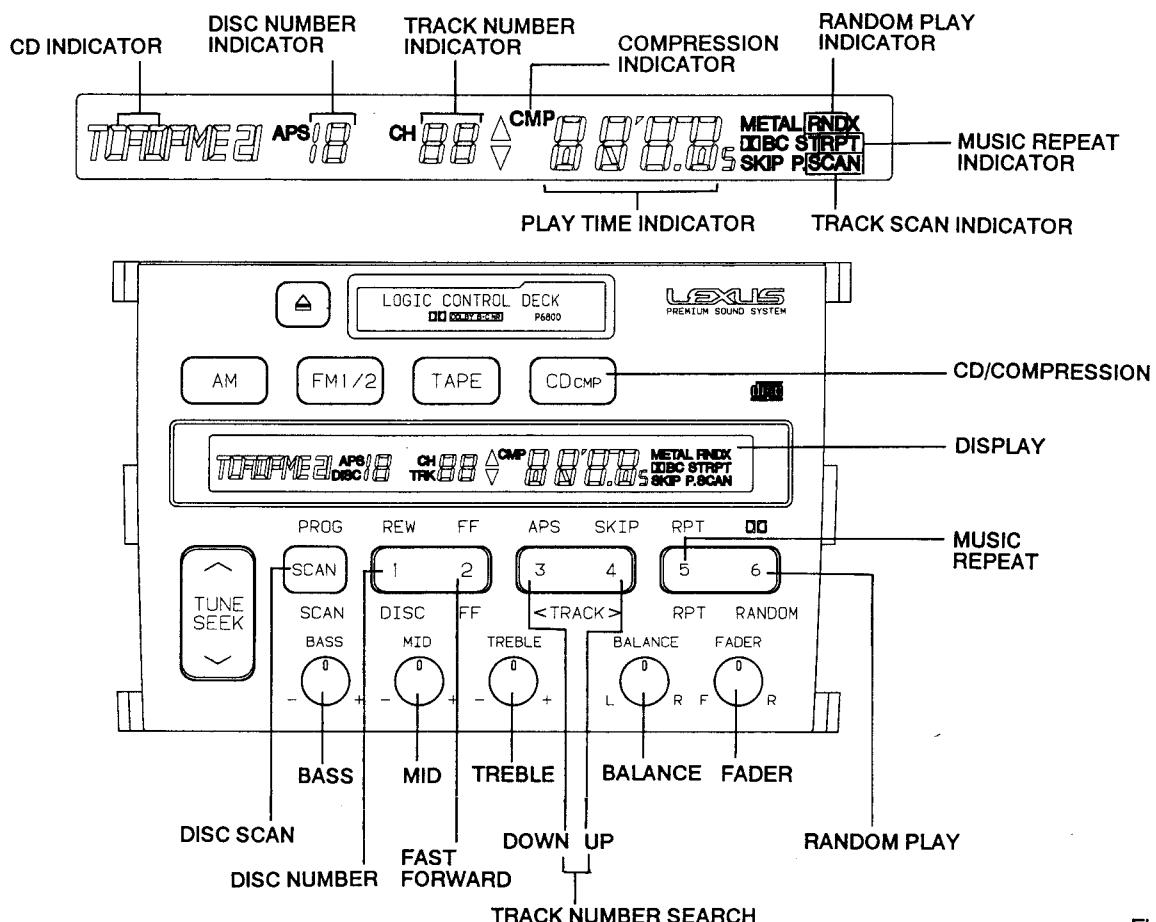


Fig. 14

● Changing the Discs:

When the DISC button is pressed, the disc number is counted up, and the disc designated by the DISC button will be played. When the DISC button is held pressed for more than 0.5 seconds, the disc number is counted up continuously. If a tray with no disc in the magazine loaded in the CD changer is selected, the corresponding disc number will not be displayed.

● Track Search:

When the TRACK < button is pressed, the track number is counted down and the designated track will be played. When the TRACK < button is held pressed for more than 0.5 seconds, the track number will be counted down continuously.

When the TRACK > button is pressed, the track number is counted up and the designated track will be played. When the TRACK > button is held pressed for more than 0.5 seconds, the track number will be counted up continuously.

● CD Compression

To switch on the compression function, press this button while the CD is being played. Pressing the button again, will turn it off.

● Fast Forward:

The playing position is fast-forwarded while the FF button is pressed. During fast-forwarding, playback sound can be heard.

● Music Repeat:

When the RPT button is pressed, the current track will be played repeatedly. Press the RPT button again to release the Music Repeat function.

● Random Play:

When the RANDOM button is pressed, the track to be played next will be selected automatically by the built-in microcomputer.

● Disc Scan:

When the SCAN button is pressed, the beginning of all the tracks on the discs loaded in the CD changer will be played for 10 seconds in sequence. When play returns to the disc from which Track Scan was started, Track Scan will be released. To release the Track Scan function during its operation, press the SCAN button again.

6. ADJUSTMENT

Notice:

Select C1 so that total capacity of 80pF is attained from the direction of the receiver jack.

Z:Output impedance of the SSG.

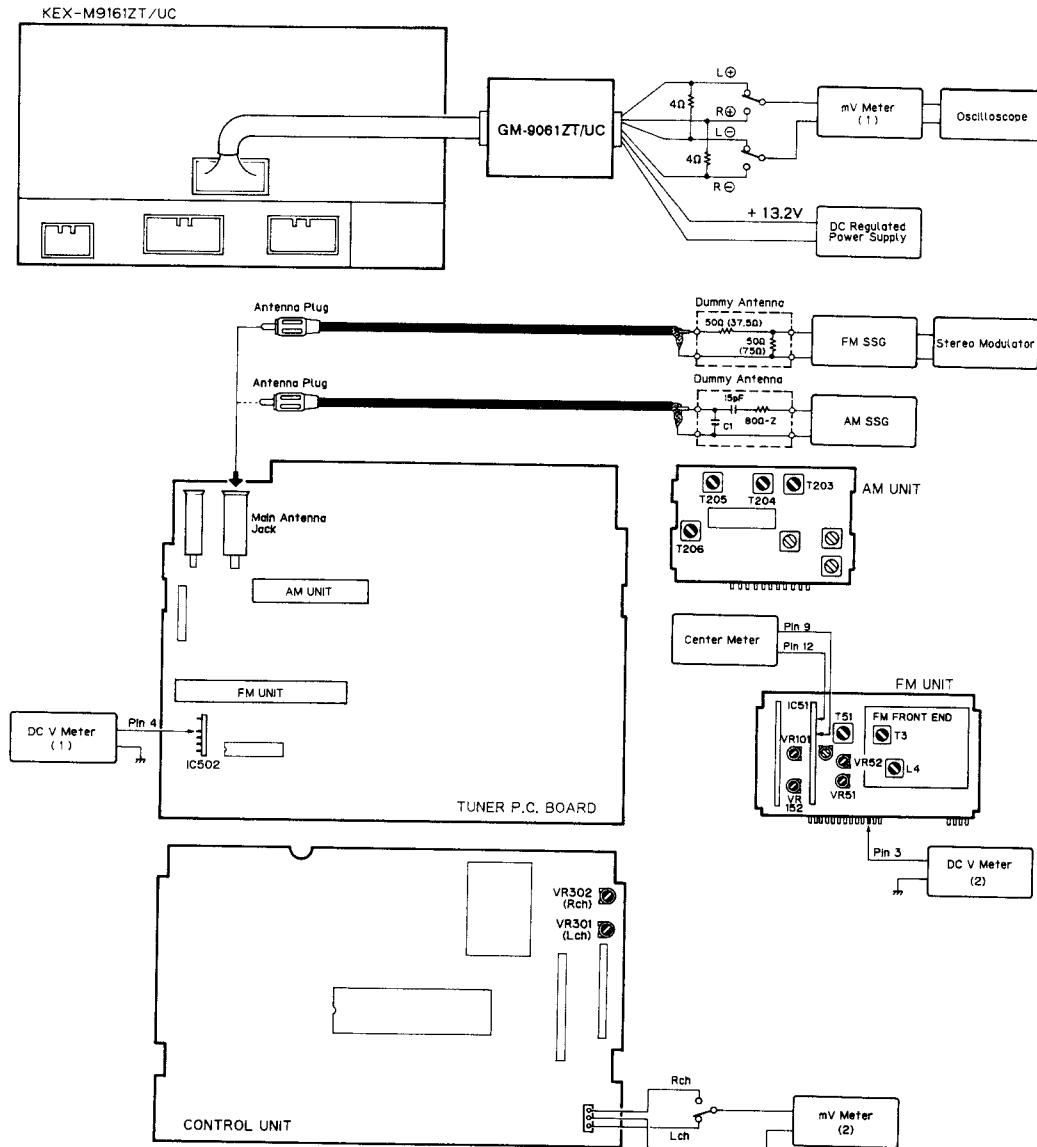


Fig. 15

DOLBY NR ADJUSTMENT

No.	Cassette Tape	Adjusting Point	Adjustment Method (Switch Position)
1	NCT-150 (400Hz, 200nwb/m)	VR301 (Lch) VR302 (Rch)	mV Meter (2) : 388mV (-6dBs) (DOLBY NR Switch:OFF)

AM ADJUSTMENT

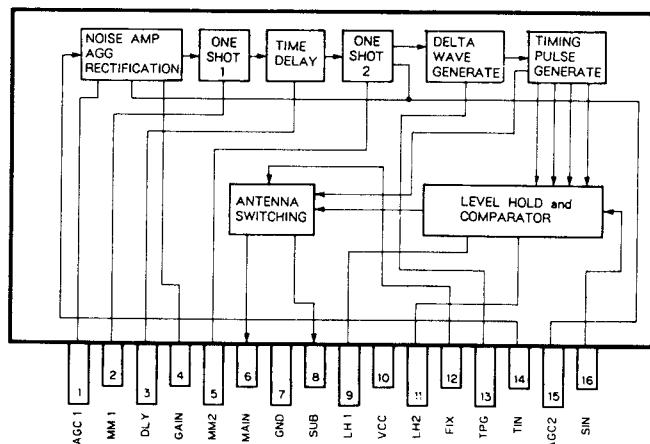
	No.	AM SSG (400Hz, 30%)		Displayed Frequency (kHz)	Adjusting Point	Adjustment Method (Switch Position)
		Frequency (kHz)	Level (dB μ V)			
Tun- ing Volt	1	—	—	530	—	Verify that DC V Meter (1) is 1.0 ± 0.3 V
	2	—	—	1,710	—	Verify that DC V Meter (1) is 6.0 ± 0.5 V
	3	600	25	600	T203, 204, 205, 206	mV Meter (1) : Maximum
SEEK	1	1.000	35 ± 8	1,000	—	Verify that SEEK stops. SEEK stops level: A dB
	2	1.000	$A+22 \pm 5$	1,000	—	Verify that SEEK stops.

FM ADJUSTMENT ※1 Stereo MOD. : 1kHz, L+R=90% , Pilot=10%

	No.	FM SSG (400Hz, 100%)		Displayed Frequency (MHz)	Adjusting Point	Adjustment Method (Switch Position)
		Frequency (MHz)	Level (dB μ V)			
IF	1	98.1	60	98.1	T51	Center Meter: 0
Front End	1	—	—	107.9	L4	DC V Meter (1) : 7.5 ± 0.2 V
	2	—	—	87.9	—	Verify that DC V Meter (1) is more than 1.4 ± 0.6 V.
	3	98.1	15	98.1	T3	mV Meter (1) : Maximum
ARC	1	98.1	60	98.1	VR51	DC V Meter (2) : 2.5 ± 0.1 V
MPX	1	98.1 ※1	60	98.1	VR101	mV Meter (1) : Separation Maximum
	2	98.1 ※1	35	98.1	VR152	mV Meter (1) : Separation 5dB
SEEK	1	98.1	21 ± 6	98.1	VR52	Make SEEK stop. SEEK stops level: B dB
	2	98.1	$B+28 \pm 10$	98.1	—	Verify that SEEK stops.

● ICs

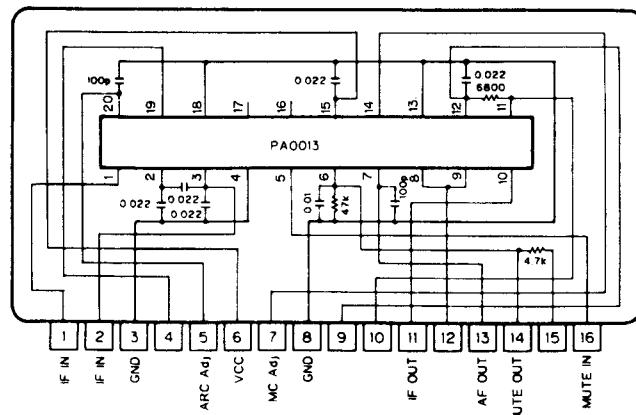
PA5011



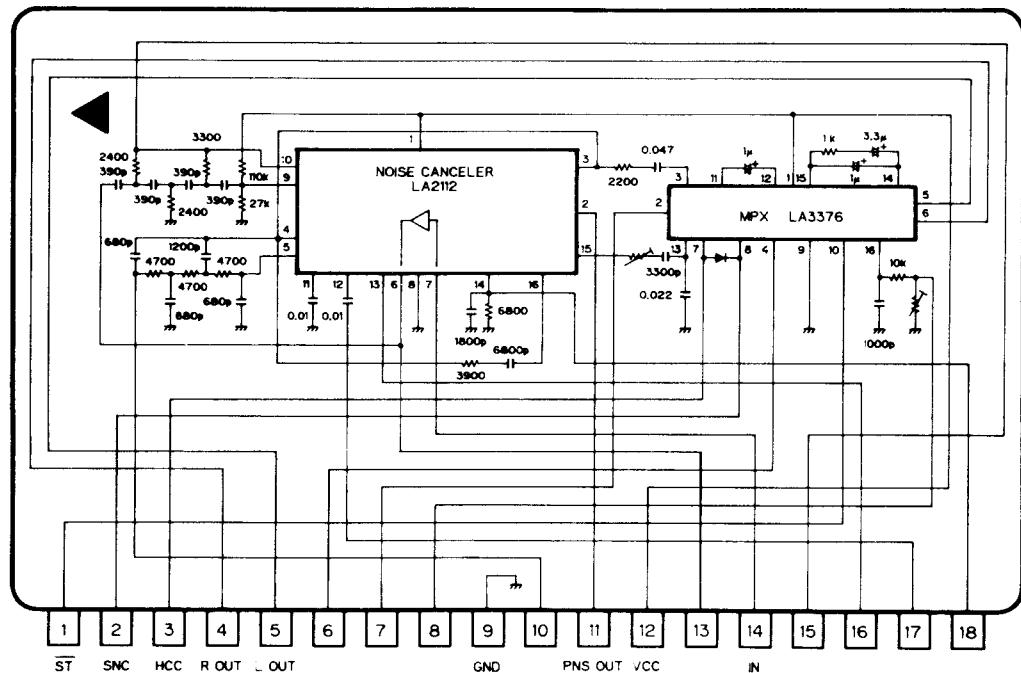
● Pin Functions (PA5011)

Pin No.	Pin Name	I/O	Functions and Operation
1	AGC1		Connected to gain control, noise amplifier AGC1 CR.
2	MM1		Connected to MMV1 output pulse width setting capacitor.
3	DLY		Connected to time delay setting capacitor.
4	GAIN		Connected to noise amplifier gain setting CR.
5	MM2		Connected to MMV2 output pulse width setting capacitor.
6	MAIN	O	"L" when the main antenna is selected.
7	GND		
8	SUB	O	"L" when the sub antenna is selected. Output phase is the opposite of that of the main antenna. Open corrector output.
9	LH1		Connected to level hold 1 capacitor.
10	VCC		
11	LH2		Connected to level hold 2 capacitor.
12	FIX	I	Auto mode when open. Fixed at main antenna when connected to GND. Fixed at sub antenna when connected to VCC.
13	TPG		Connected to timing pulse generation capacitor.
14	TIN	I	Noise amplifier input terminal. The tuner signal meter output signal passes through a capacitor and is input.
15	AGC2		Connected to noise amplifier AGC2 CR.
16	SIN	I	Level hold circuit input terminal. Tuner signal meter output signal is input.

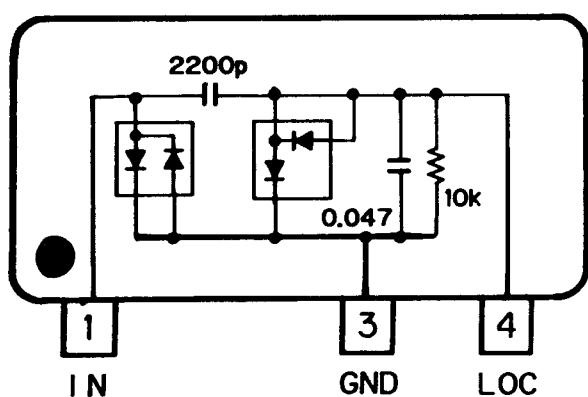
KHA141A



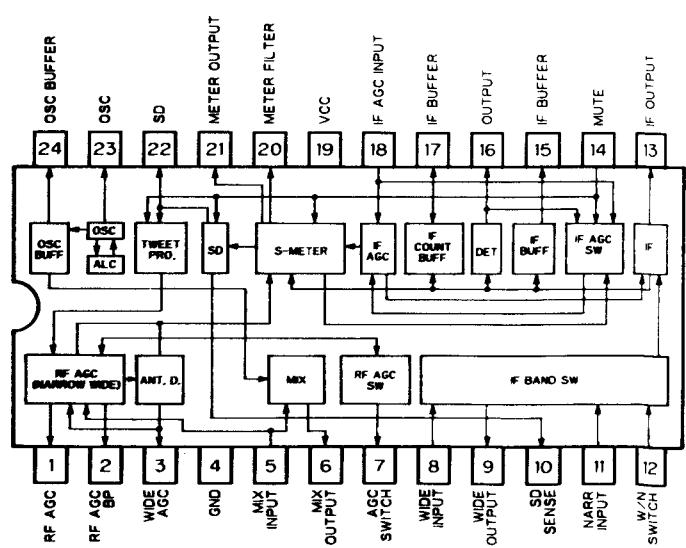
KHA146



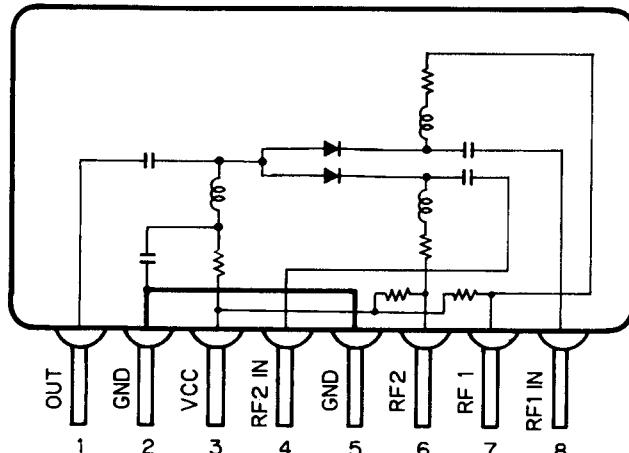
KHA507A



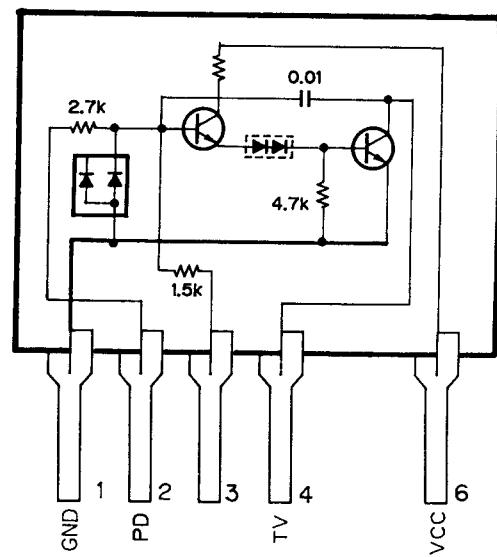
LA1136N



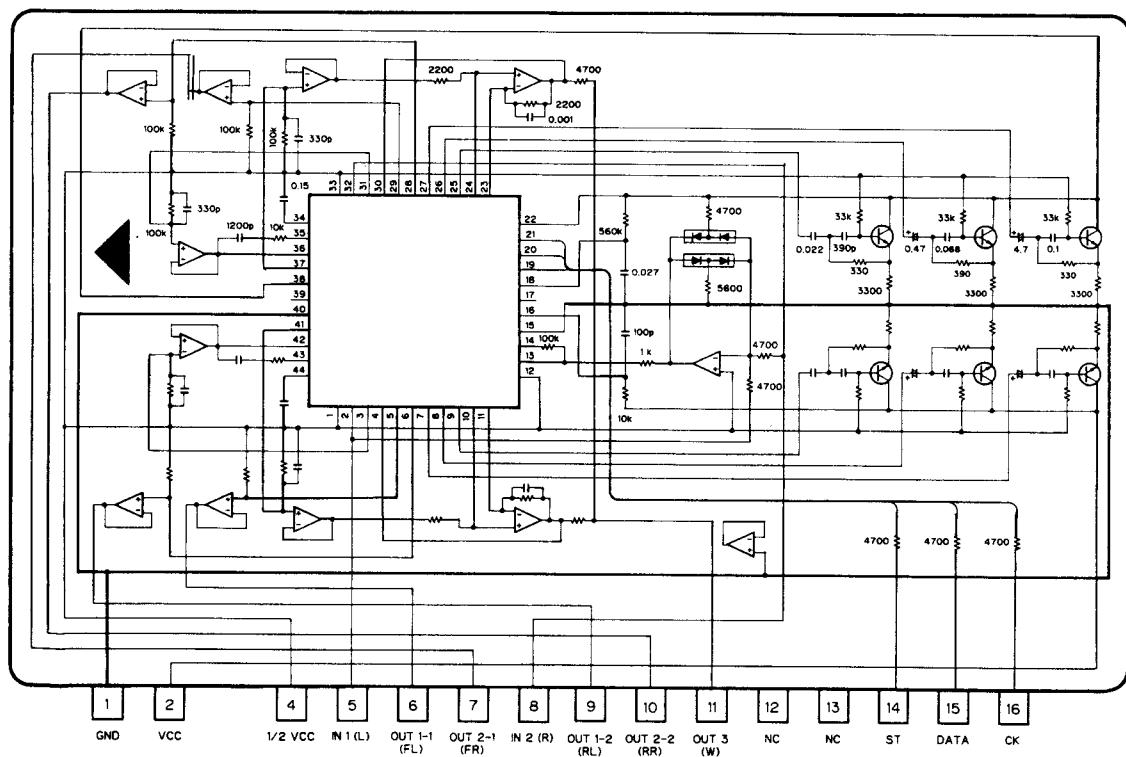
KHA805A



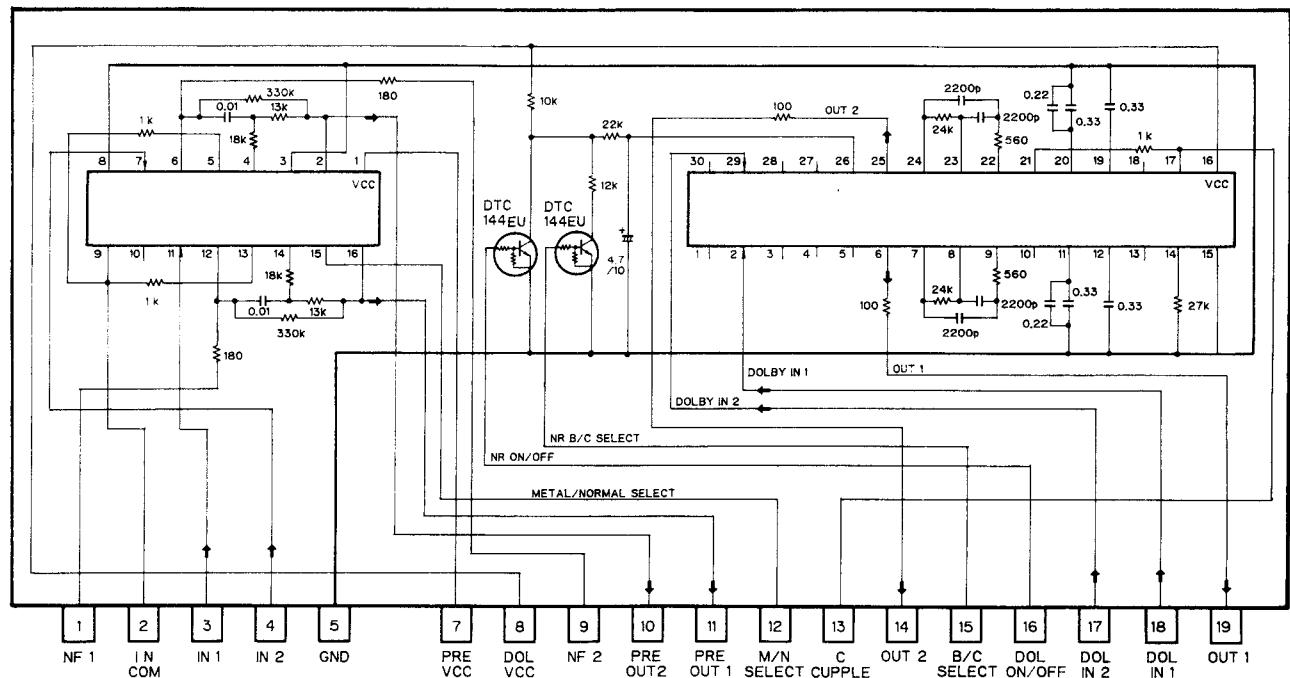
KHA510



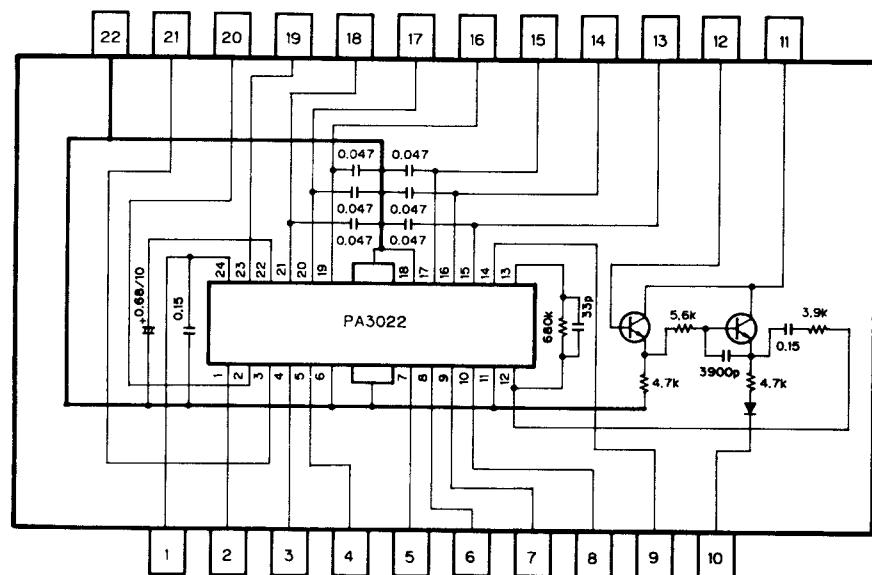
KHA163



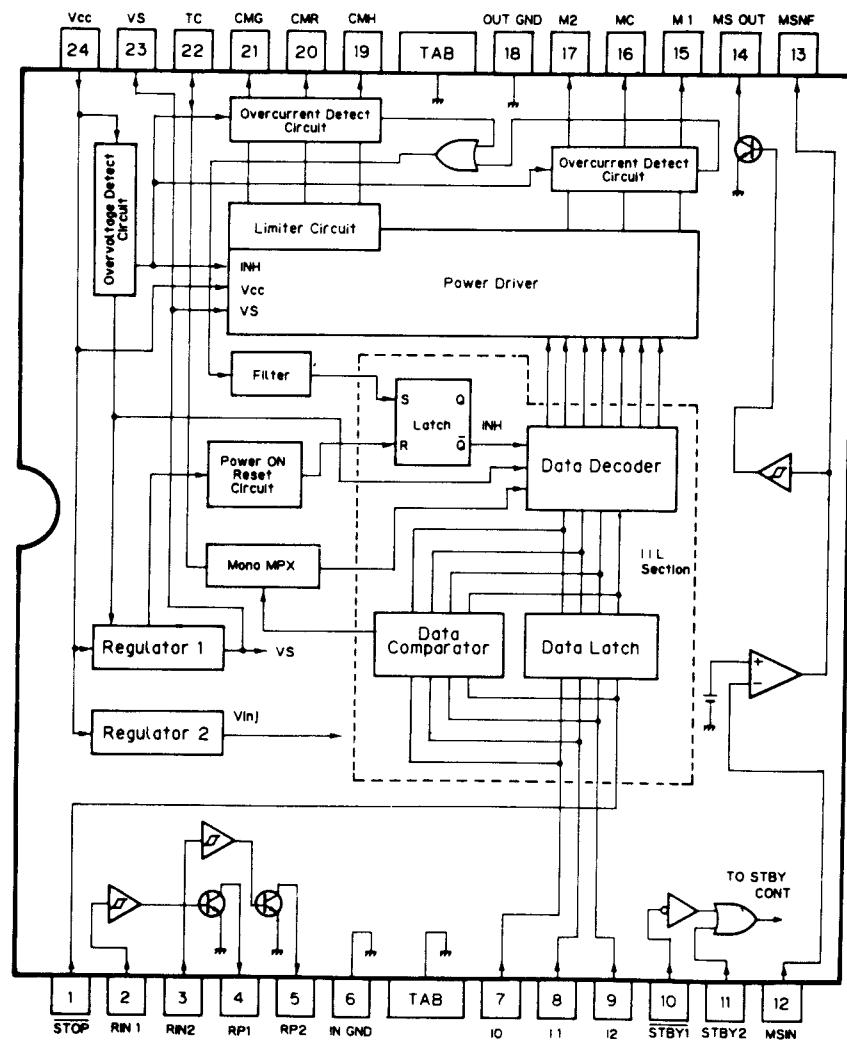
CWV1017



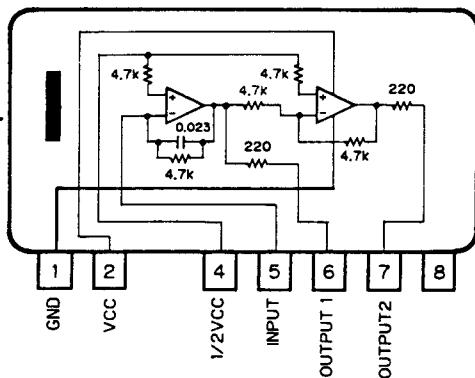
CWW1178



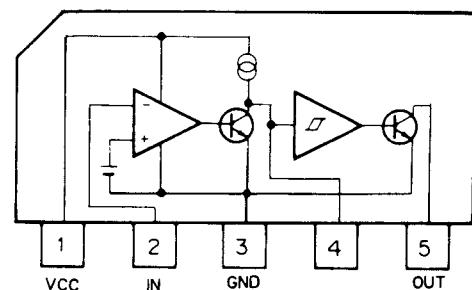
PA3022



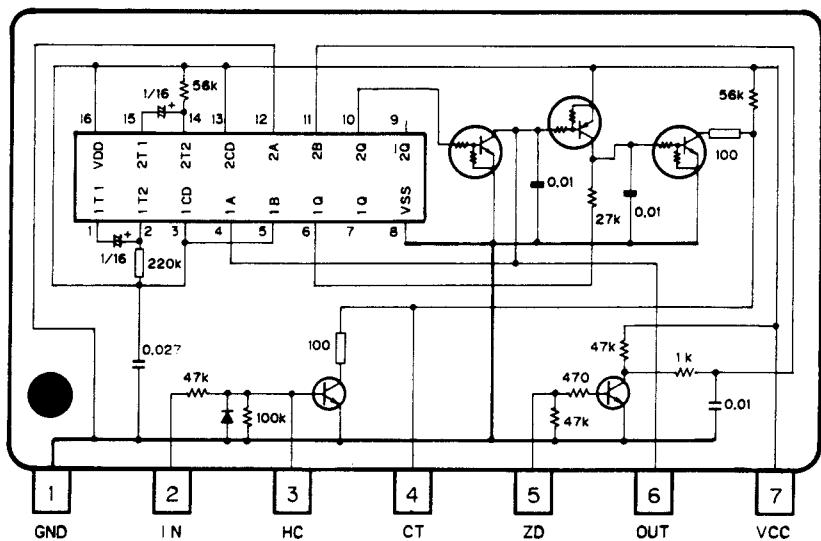
KHA233A



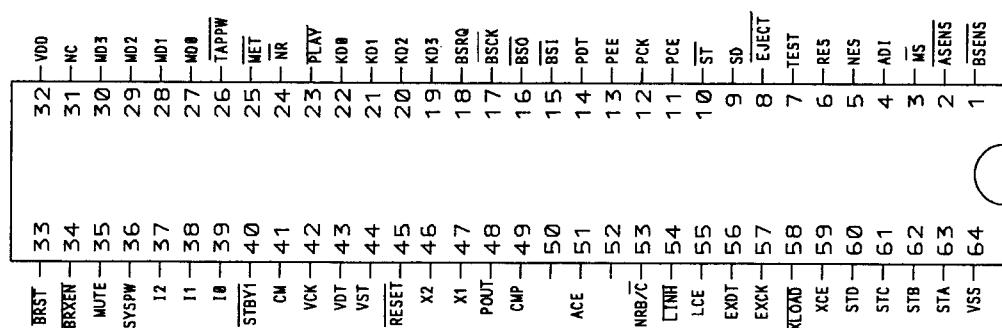
M51957BL



CWV1001



* PD4243



IC's marked by * are MOS type.

Be careful in handling them because they are very liable to be damaged by electrostatic induction.

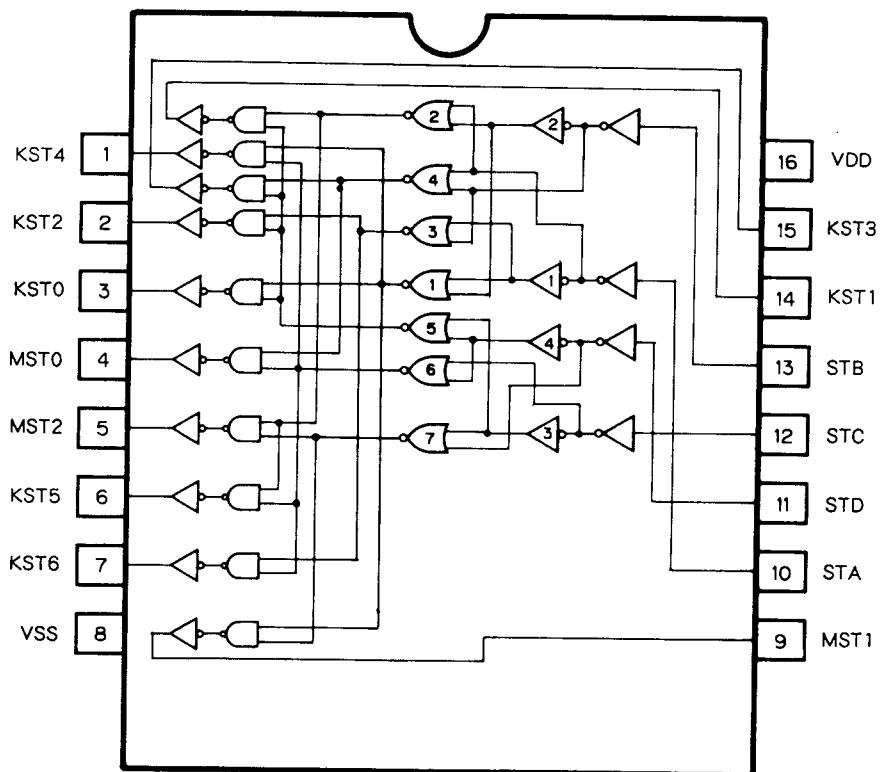
● Pin Function (PD4243)

Pin No.	Pin Name	I/O	Output Format	Function and Operation
1	BSENS	Input		Back up power sense input pin
2	ASENS	Input		ACC power sense input pin
3	MS	Input		Tape MS signal input pin
4	ADI	Input		Data input pin from A/D converter(IC607)
5	NES	Input		Reel pulse input pin for forward side of the tape
6	RES	Input		Reel pulse input pin for reverse side of the tape
7	TEST	Input		Not used
8	EJECT	Input		Eject signal input pin
9	SD	Input		SD input pin
10	ST	Input		Stereo input pin
11	PCE	Output	C	PLL IC(IC501) chip enable output pin
12	PCK	Output	C	PLL IC(IC501) clock out put pin
13	PEE	Output	C	Beep tone output pin
14	PDT	Output	C	PLL IC(IC501) data out put pin
15	BST	Input		Bus communication serial data input pin
16	BSO	Output	C	Bus communication serial data output pin
17	BSCK	Input/Output	C	Bus communication serial clock input/output pin
18	BSRQ	Input		Bus communication service request input pin
19	KD3 1 22 KDO	Input		Key data input pins
23	PLAY	Output	N	Tape MS filter select output pin
24	NR	Output	N	Dolby NR ON/OFF output pin
25	MET	Output	N	Tape METAL ON/OFF output pin
26	TAPPW	Output	N	Tape power ON/OFF output pin
27	MDO 1 30 MDS	Input		Mechanism switch sense input pins
31	NC			
32	VDD			Device power supply terminal
33	BRST	Output	C	Bus communication reset output pin
34	BRXEN	Input/Output	C	Bus communication reception enable input pin

Pin No.	Pin Name	I/O	Output Format	Function and Operation
35	MUTE	Output	C	System mute output pin
36	SYSPW	Output	C	System power ON/OFF control output pin
37 38 39	I2 I1 IO	Output	C	Data output pins for mechanism driver(IC602)
40	STBYT	Output	C	Standby output pin for mechanism driver(IC602)
41	CM	Output	C	Capstan motor ON/OFF control output pin
42	VCK	Output	C	Clock output pin for electronic volume(IC453)
43	VDT	Output	C	Data output pin for electronic volume(IC453)
44	VST	Output	C	Strobe pulse output pin for electronic volume(IC453)
45	RESET	Input		Reset input pin
46 47	X2 X1			Crystal oscillator connection pins
48	POUT	Output	C	Pulse output pin for watch dog timer(IC606)
49	CMP	Output	C	CD compression ON/OFF output pin
50	ANTILED	Output	C	Not used
51	ACE	Output	C	Chip enable output pin for A/D converter(IC607)
52	ECE	Output	C	Not used
53	NRB/C	Output	C	Dolby NR B/C selector output pin
54	LINH	Output	C	Inhibit output pin for LCD driver(IC901)
55	LCE	Output	C	Chip enable output pin for LCD driver(IC901)
56	EXDT	Output	C	Data output pin for external IC
57	EXCK	Output	C	Clock output pin for external IC
58	XLOAD	Output	C	Data load output pin for expander(IC851)
59	XCE	Output	C	Chip enable pin for expander(IC851)
60 63	STD STA	Output	C	Mechanism switch, strobe output pins
64	VSS			GND terminal

Output format	Meaning
N	Nchannel open drain
C	C-MOS

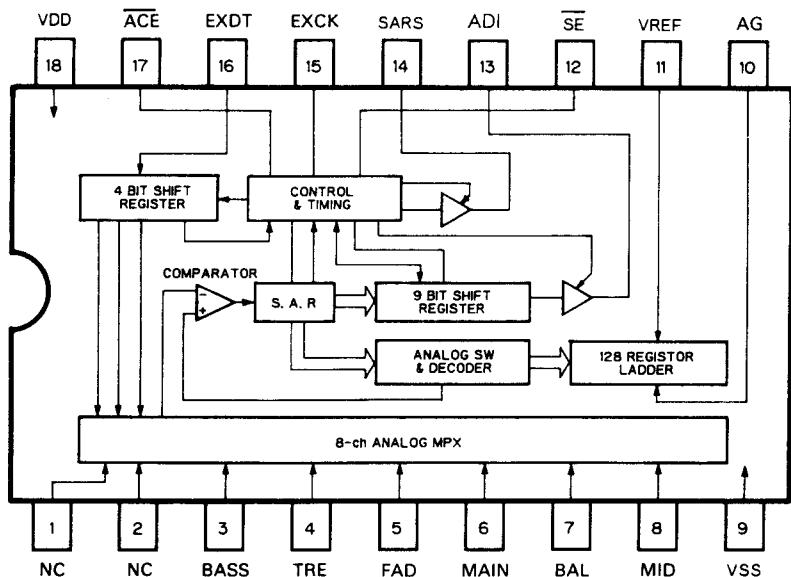
TC4028BP



● Pin Function (TC4028BP)

Pin No.	Pin Name	I/O	Output Format	Function and Operation
1	KST4	Output	C	Key matrix strobe output pins
2	KST2			
3	KST0			
6	KST5			
7	KST6			
14	KST1			
15	KST3			
8	VSS			GND terminal
4	MST0	Output	C	Mechanism switch, strobe output pins
5	MST2			
9	MST1			
10	STA	Input		Data input pins
11	STD			
12	STC			
13	STB			
16	VDD			Device power supply terminal

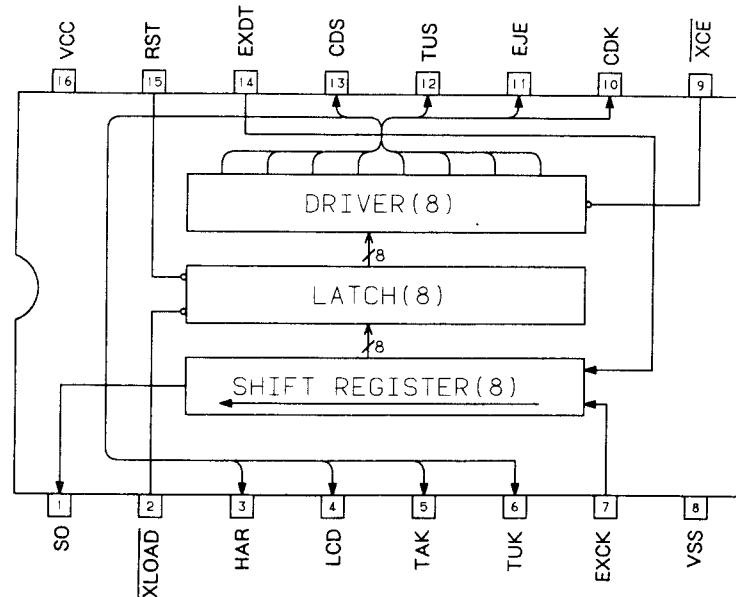
TC35095P



● Pin Function (TC35095P)

Pin No.	Pin Name	I/O	Output Format	Function and Operation
1	N. C			Not used
2	N. C			Not used
3	BASS	Input		BASS level input terminal
4	TRE	Input		TREBLE level input terminal
5	FAD	Input		FADER level input terminal
6	MAIN	Input		VOLUME level input terminal
7	BAL	Input		BALANCE level input terminal
8	MID	Input		MIDDLE level input terminal
9	VSS			GND terminal
10	AG			Analog GND terminal
11	VREF	Input		Reference voltage input pin
12	SE	Input		Not used
13	ADI	Output	C	Serial data output pin
14	SARS	Output	C	Not used
15	EXCK	Input		Serial clock input pin
16	EXDT	Input		Data input pin
17	ACE	Input		Chip enable input pin
18	VDD			Device power supply terminal

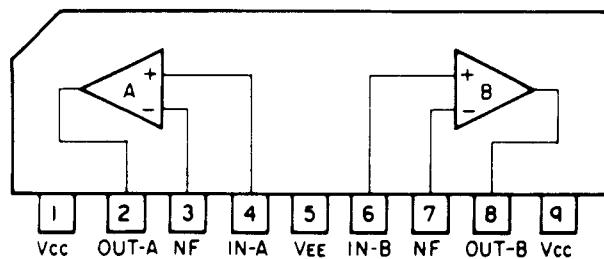
MB88306P



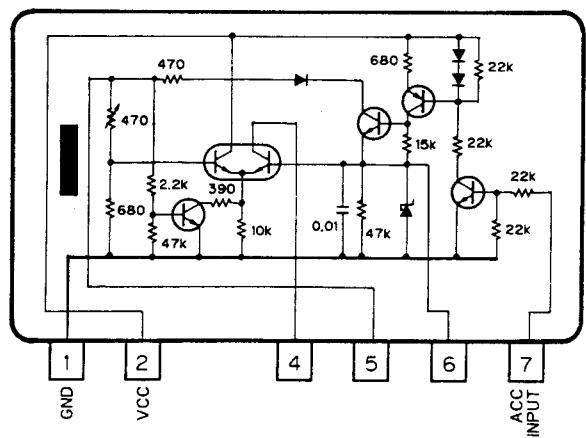
● Pin Function (MB88306P)

Pin No.	Pin Name	I/O	Output Format	Function and Operation
1	SO	Output	C	Serial data output pin
2	XLOAD	Input		Data load input pin
3	HAR	Output	C	Not used
4	LCD	Output	C	Lamp of LCD ON/OFF control output pin
5	TAK	Output	C	Lamp of tape key ON/OFF control output pin
6	TUK	Output	C	Lamp of tuner key ON/OFF control output pin
7	EXCK	Input		Clock input pin
8	VSS			GND terminal
9	XCE	Input		Chip enable input pin
10	CDK	Output	C	Lamp of CD key ON/OFF control output pin
11	EJE	Output	C	
12	TUS	Output	C	Lamp of tuner system ON/OFF control output pin
13	CDS	Output	C	Lamp of CD system ON/OFF control output pin
14	EXDT	Input	C	Serial data output pin
15	RST	Input		Reset input pin
16	VDD			Device power supply terminal

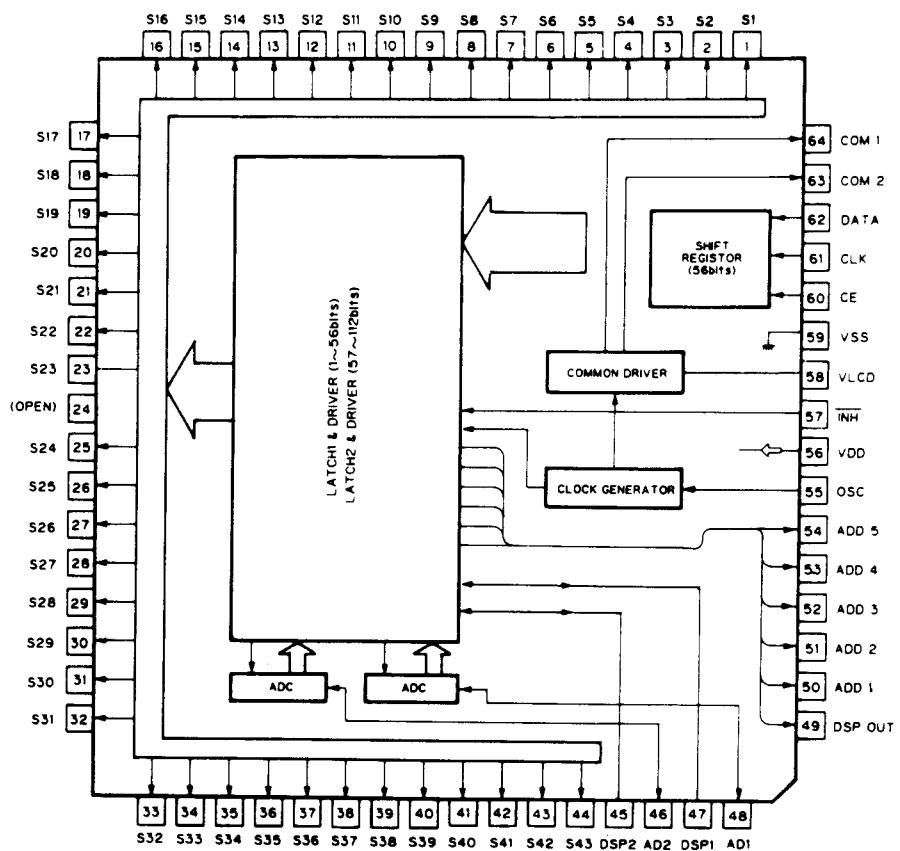
NJM2068SD



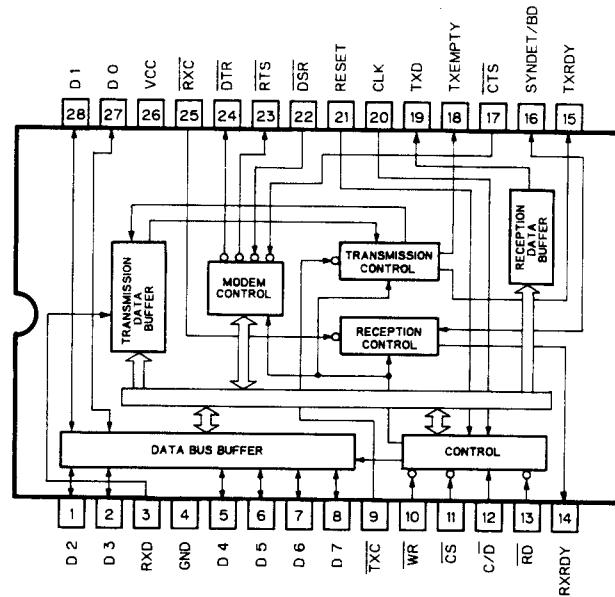
KHA241



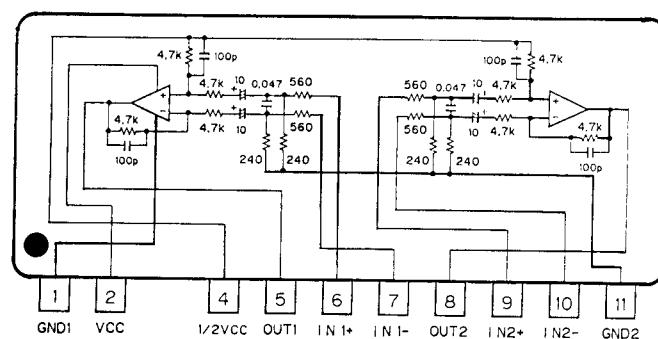
LC7582ASP



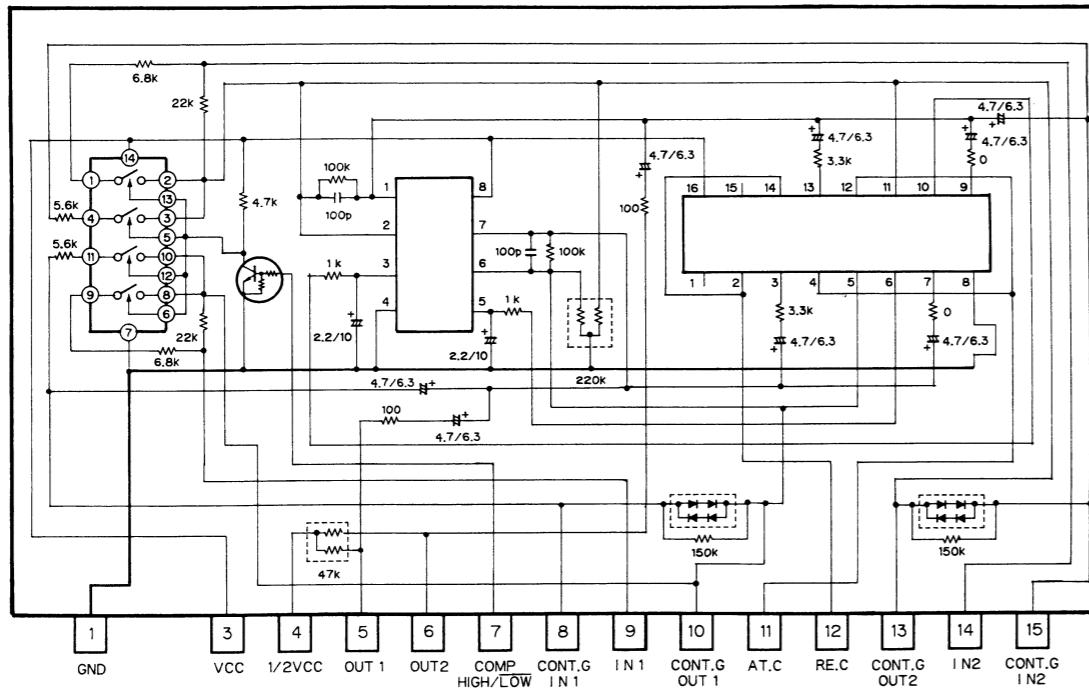
GGF-910



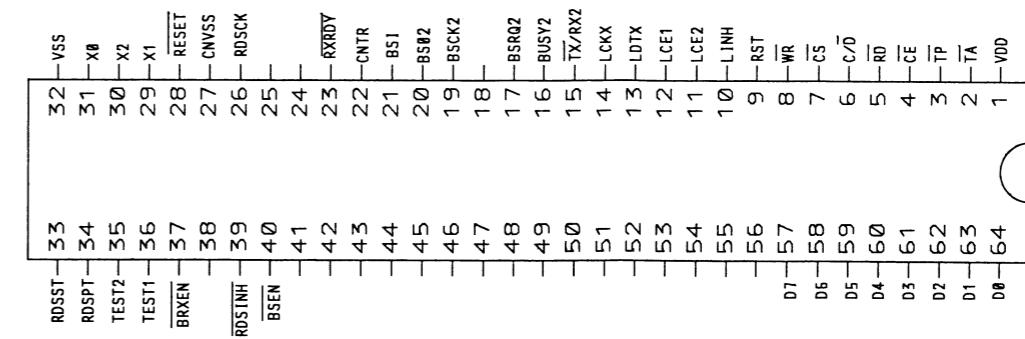
KHA232A



CWV1019



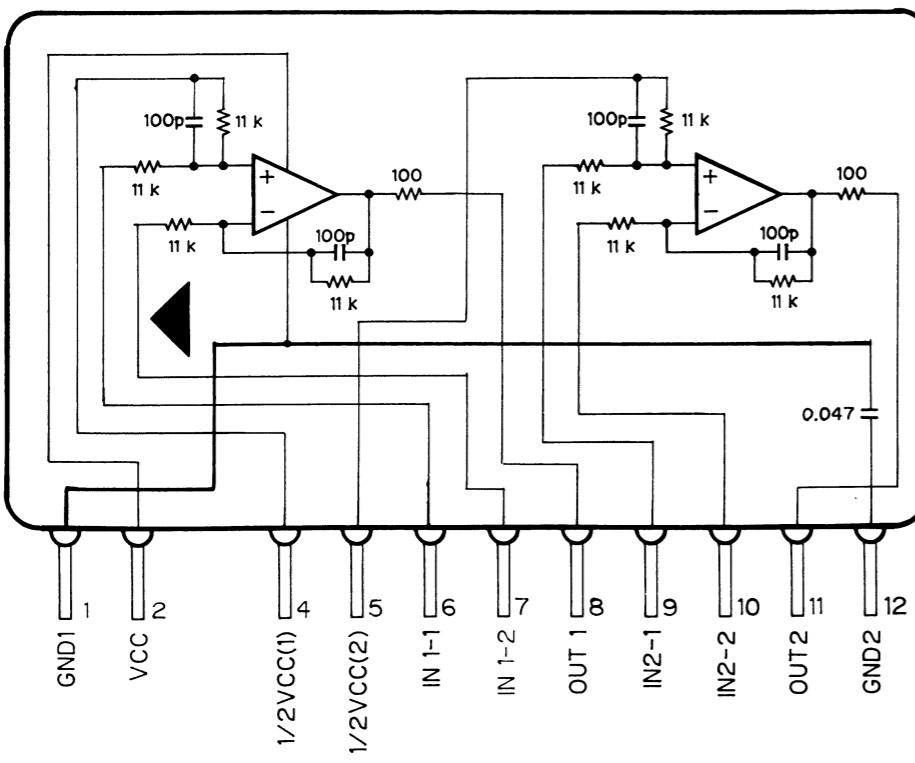
*PD5137



● Pin Function (PD5137)

Pin No.	Pin Name	I/O	Output Format	Function and Operation
1	VDD			Device power supply terminal
2	TA	output	C	Not used
3	TP	output	C	Not used
4	CE			Not used
5	RD	output	C	Read signal output pin for IC352
6	C/D	output	C	Control/Data switching signal output pin for IC352
7	CS	output	C	Chip select signal output pin for IC352
8	WR	output	C	Write signal output pin for IC352
9	RST	output	C	Reset signal output pin for IC352
10	LINH	output	C	No used
11	LCE2	output	C	No used
12	LCE1	output	C	No used
13	LDTX	output	C	No used
14	LCKX	output	C	No used

KHA173



Pin No.	Pin Name	I/O	Output Format	Function and Operation
15	TX/RX2	Output	C	Bus communication TX(Transmission)/RX(Reception) control output pin
16	BUSY2	Output	C	Bus communication busy output pin
17	BSRQ2	Output	C	Bus communication service request output pin
18	NC			
19	BSCK2	Input/Output	C	Bus communication serial clock input/output pin f=19.2kHz
20	BSO2	Output	C	Bus communication serial data output pin
21	BSI	Input		Bus communication serial data input pin
22	CNTR	Output	C	Communication sampling clock output pin for IC352 f=76.8kHz
23	RXRDY	Input		Reception request input pin
24	NC			
25	NC			
26	RDSCK	Input		Not used
27	CNVSS	Input		GND
28	RESET	Input		Reset input pin
29	X1	Input	C	Crystal oscillator connection pins
30	X2	Output	C	
31	XO	Output	C	Clock output pin for IC352 f=1,228,800Hz
32	VSS			GND
33	RDSST	Input		Not used
34	RDSDT	Input		Not used
35	TEST2	Input		Not used
36	TEST1	Input		
37	BRXEN	Input		Bus communication reception enable input pin
38	NC			
39	RDSTNH	Input		Not used
40	BSEN	Input		Back up power sense input pin
41	NC			
56				
57	D7	Input/Output		Data input/output pins for IC352
64	DO			

● LCD (CAW1080)

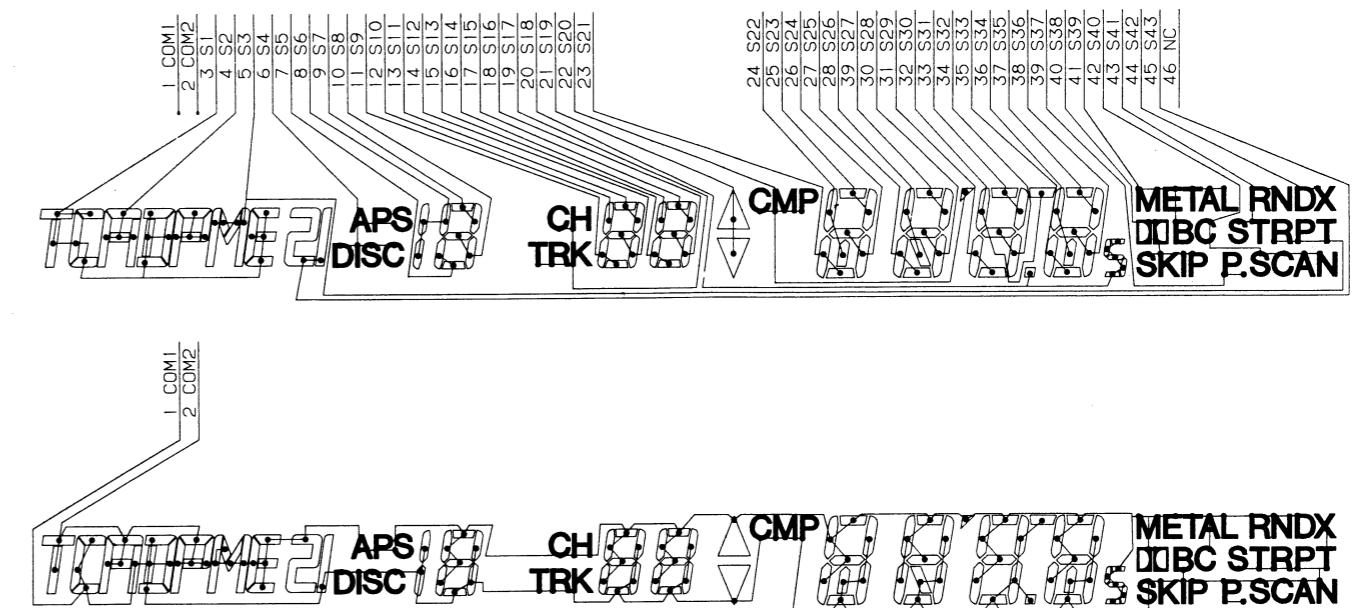
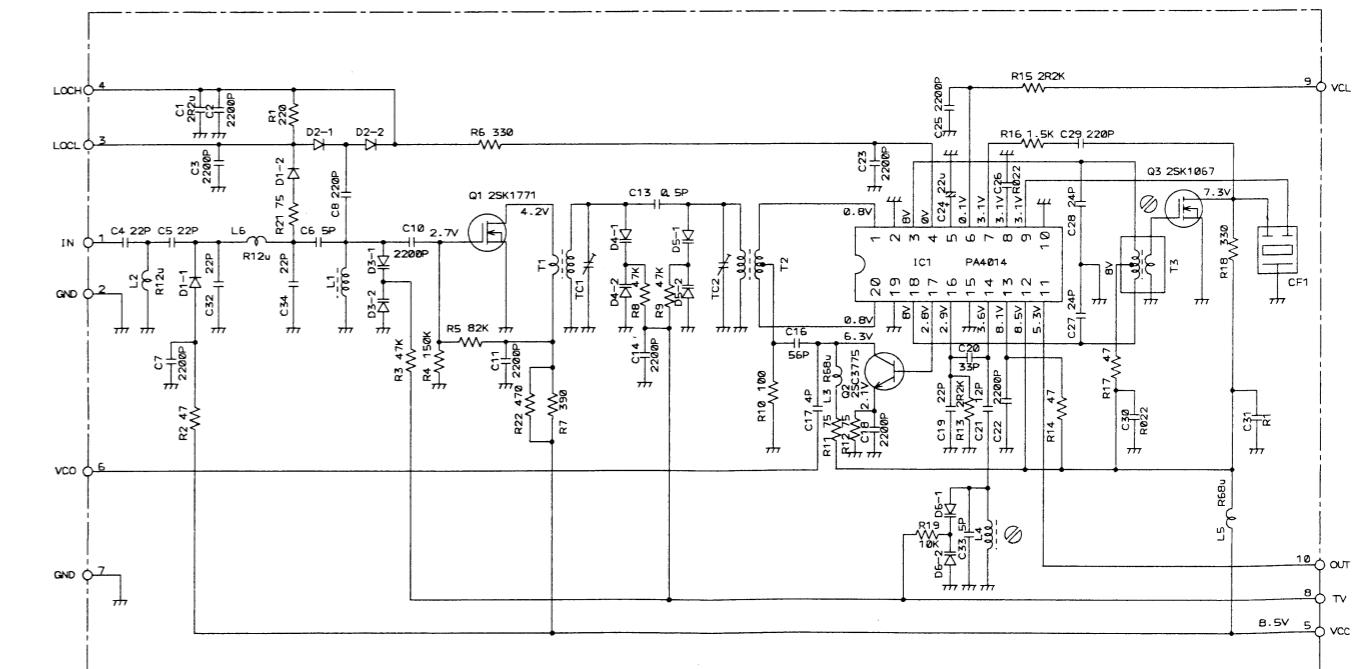


Fig. 16

● FM Front End (CWB1059)



7. CONNECTION DIAGRAM

CONTROL UNIT

IC, Q IC301

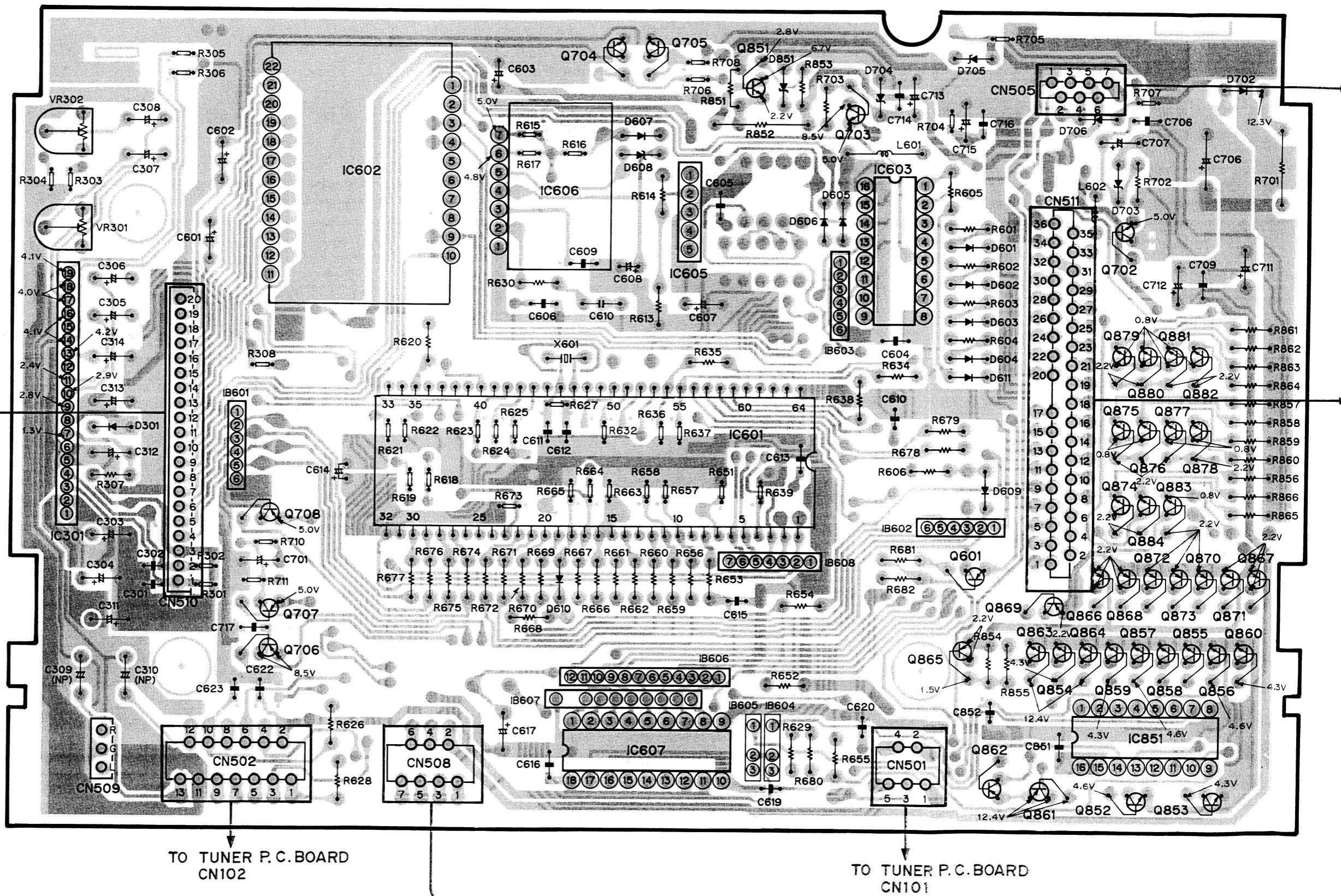
ADJ. VR302
VR301Q708
Q707
Q706

IC602

IC606 IC607
IC601 Q704 Q705 IC605

Q851

Q702	Q879	Q880	Q881	Q882
Q869	Q866	Q875	Q876	Q877
Q861	Q854	Q864	Q874	Q884
Q865	Q863	Q868	Q872	Q873
Q862	Q861	Q852	Q859	Q857
Q853	Q856	Q858	Q857	Q853

TO CASSETTE
MECHANISM ASSY

380 Q881 Q882
376 Q877 Q878 Q867
384 Q883 Q870 Q871
372 Q873 Q855 Q860
357 Q858 Q853 Q856

COMMUNICATION UNI

IC, Q Q354 Q353 IC352 Q352 Q351 IC351 IC353 Q35

TO AUDIO P.C. BOARD
CN205

→ TO TUNER P. C. BOARD
CN103

A

The image shows a top-down view of an integrated circuit package labeled 'IB351'. The package is a rectangular plastic case with a metal lead frame. It has eight circular pins on the right side. On the left side, there is a vertical column of resistors labeled '100k' followed by a multiplier '7'. The resistors are connected in a series circuit, with the first resistor connected to the first pin and the last resistor connected to the eighth pin. The resistors are labeled '100k' followed by a multiplier '7'.

This diagram shows the layout of a circuit board for CN403. The board features several integrated circuits (IC352, IC353, IC351, IC355) and various passive components (resistors R351-R397, capacitors C351-C365, diodes D352-D359, and inductors L351-L352). The ICs are arranged in a grid, with IC352 at the top center, IC353 to its right, IC351 below IC352, and IC355 to the right of IC351. The component layout includes a central horizontal line with a gap for IC352, and a vertical line to its right for IC353. IC351 is positioned below IC352, and IC355 is to the right of IC351. Various resistors (R351-R397) are distributed around the ICs, with some forming part of feedback networks. Capacitors (C351-C365) are placed near the ICs and resistors. Diodes (D352-D359) are used for protection and biasing. Inductors (L351-L352) are also present. The board is densely populated with components, and the layout is designed for optimal performance and reliability.

IB353

IB352

100k x 3

IB354

6

0

6

Fig. 18

8. SCHEMATIC CIRCUIT DIAGRAM

A

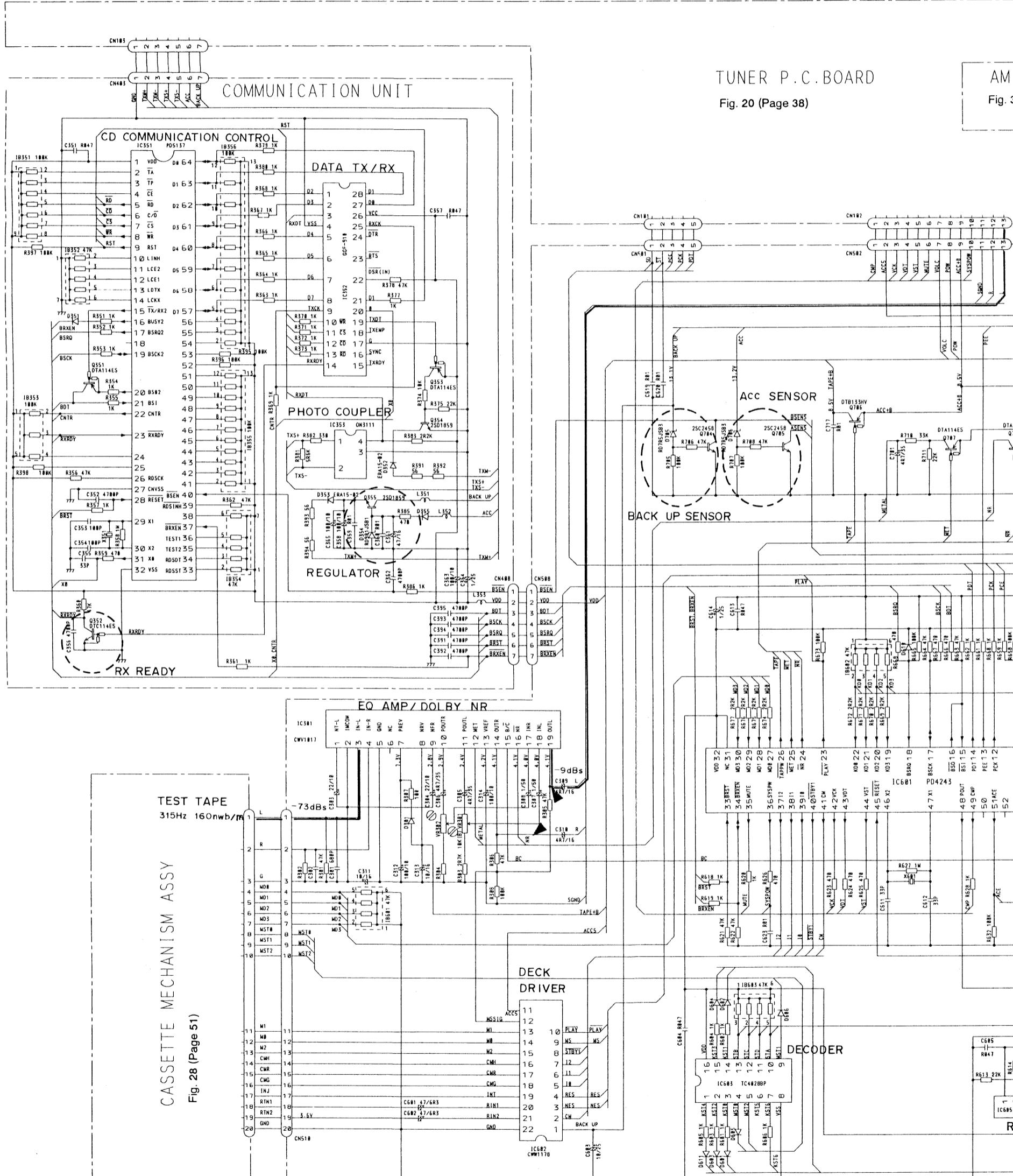
四

C

1

1

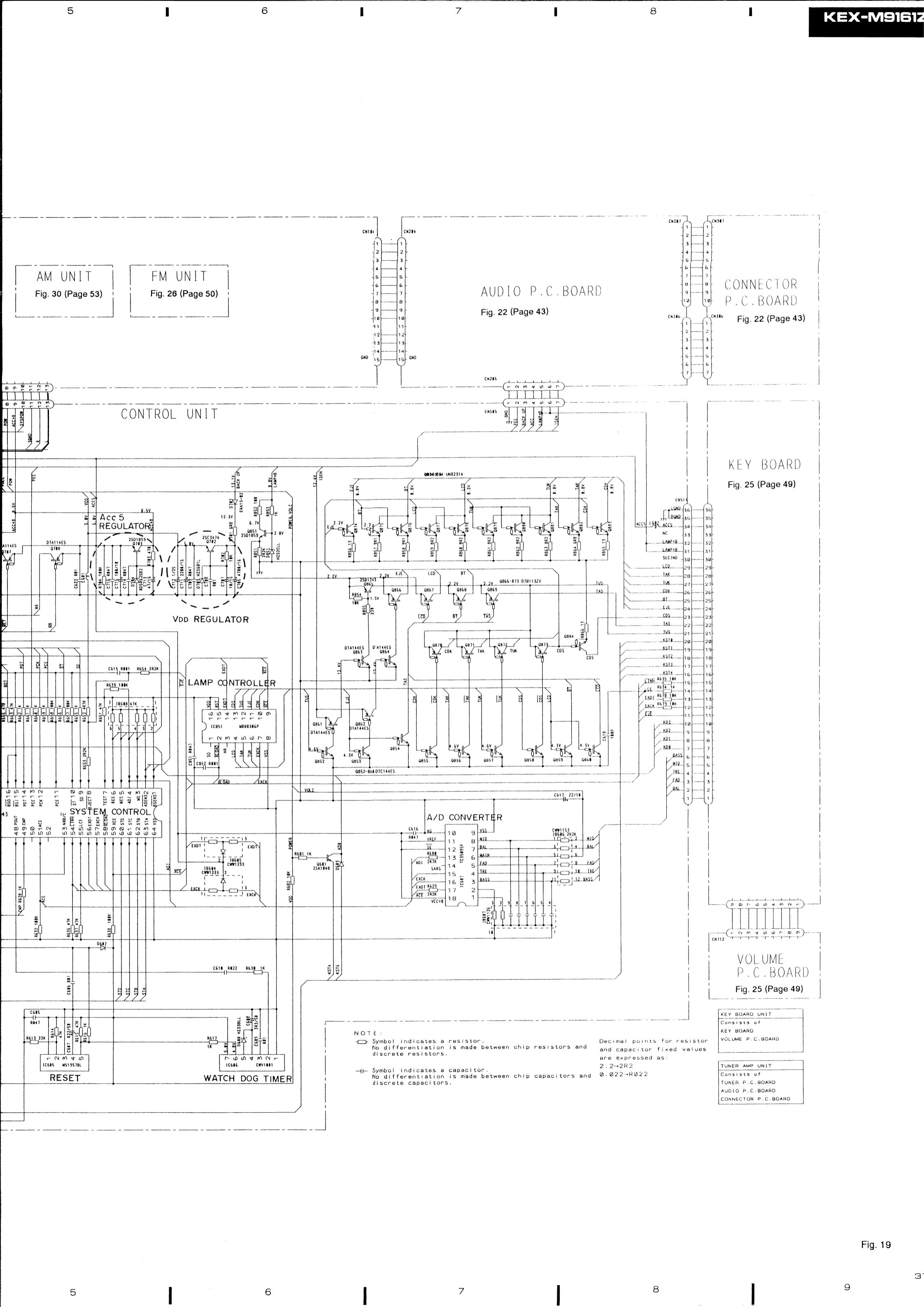
6



TUNER P.C. BOARD

Fig. 20 (Page 38)

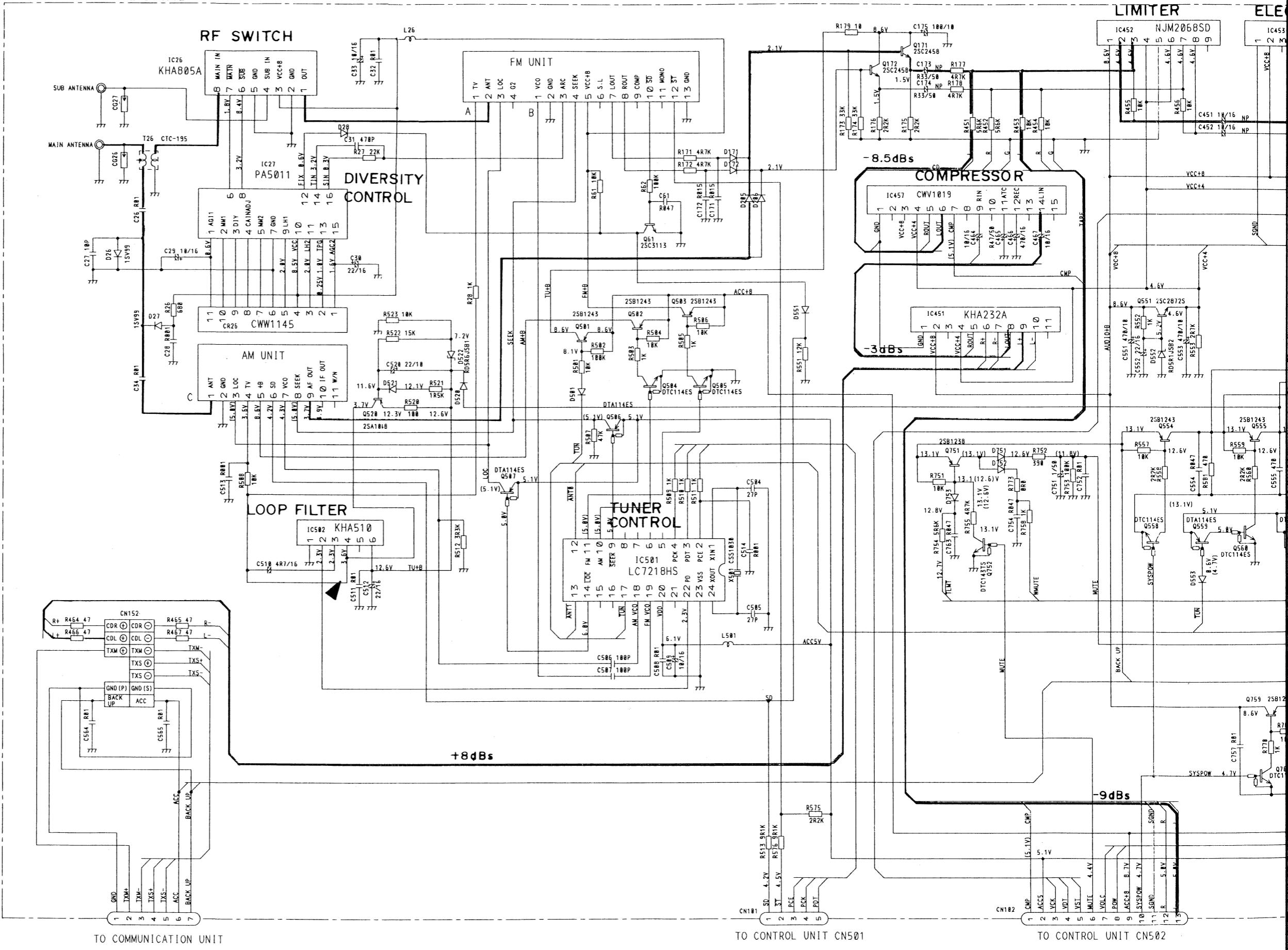
AM



9. CIRCUIT DIAGRAM AND P.C. BOARDS PATTERN

9.1 TUNER P.C. BOARD

TUNER P.C. BOARD



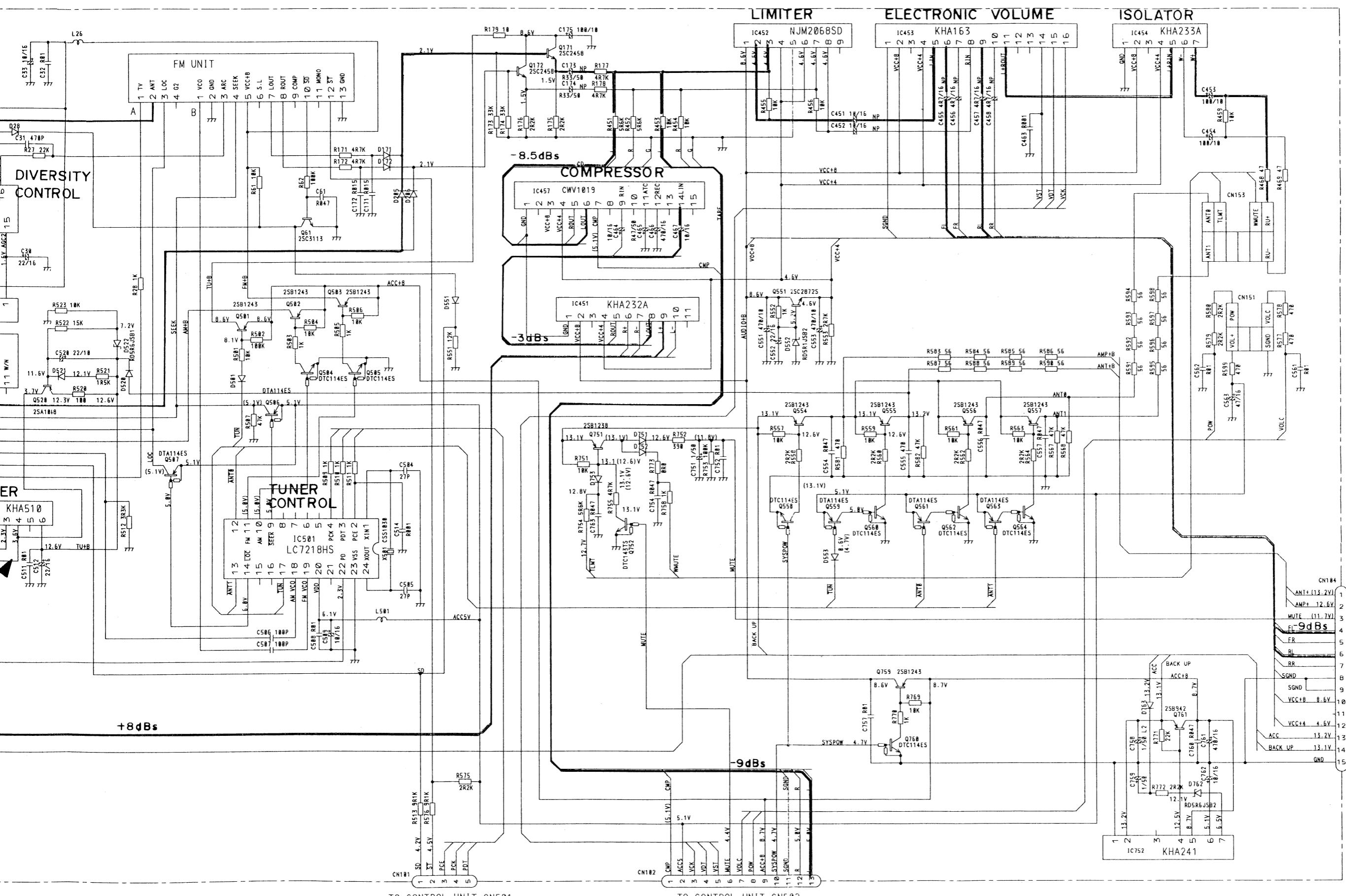


Fig. 20

TUNER P.C. BOARD

TO COMMUNICATION UNIT
CN403

Q760 IC752	IC453	Q751	Q752	IC452	IC457	Q171	Q556	Q554	Q558	Q559	Q561	Q562	Q564	Q503	Q61	Q507	Q505	IC501	Q501	IC27	IC26
IC. Q Q761 Q759 Q551						IC451	Q172	Q555	Q560	Q563	Q563	Q557					Q505	Q502	Q502	Q504	Q506

A

A

TO AUDIO
P.C. BOARD
CN204

TO AM UNIT

C

C

TO CONTROL
UNIT CN502

TO FM UNIT

D

D

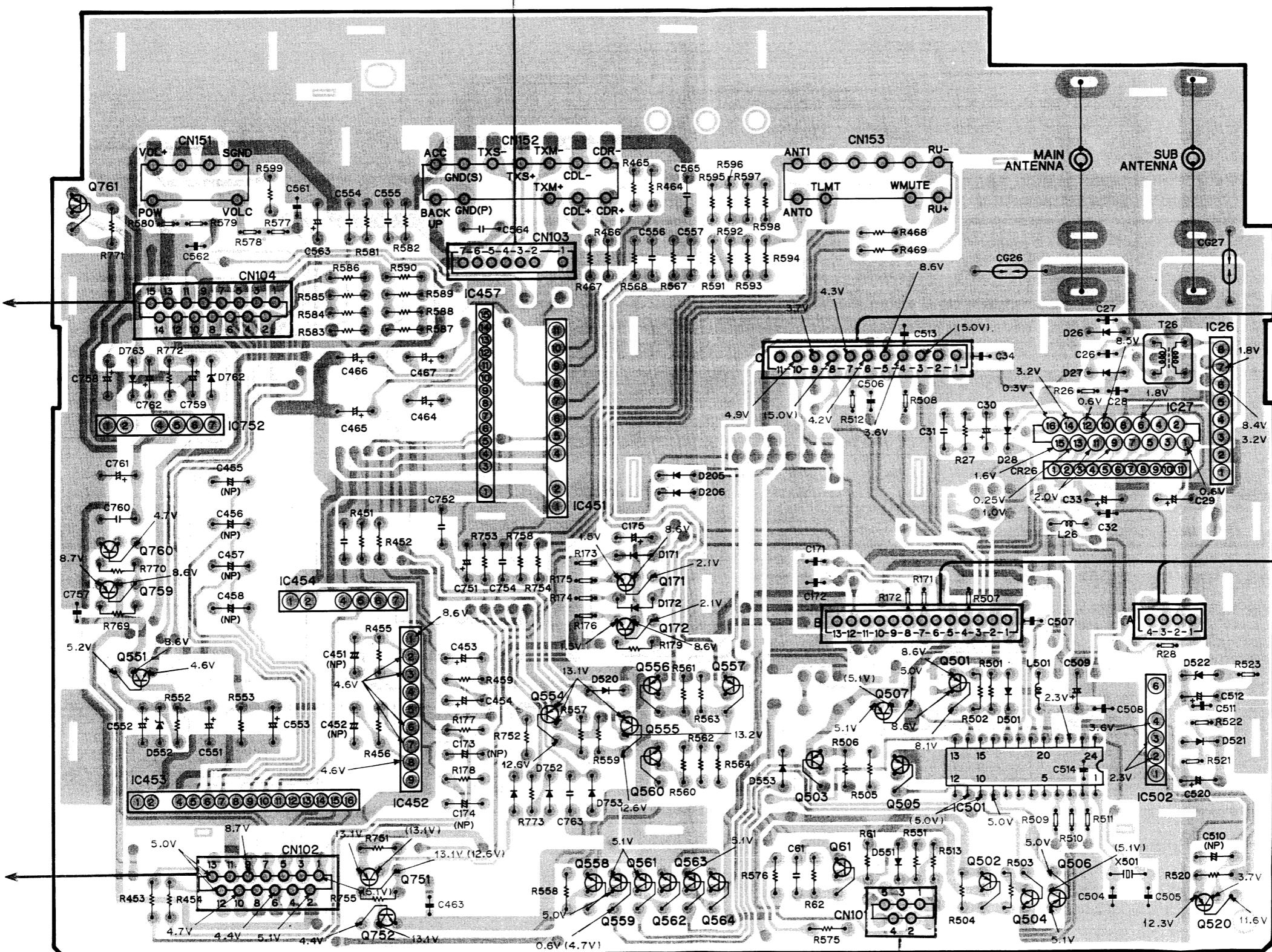
TO CONTROL UNIT
CN501

Fig. 21

9.2 AUDIO P.C. BOARD AND CONNECTOR P.C. BOARD

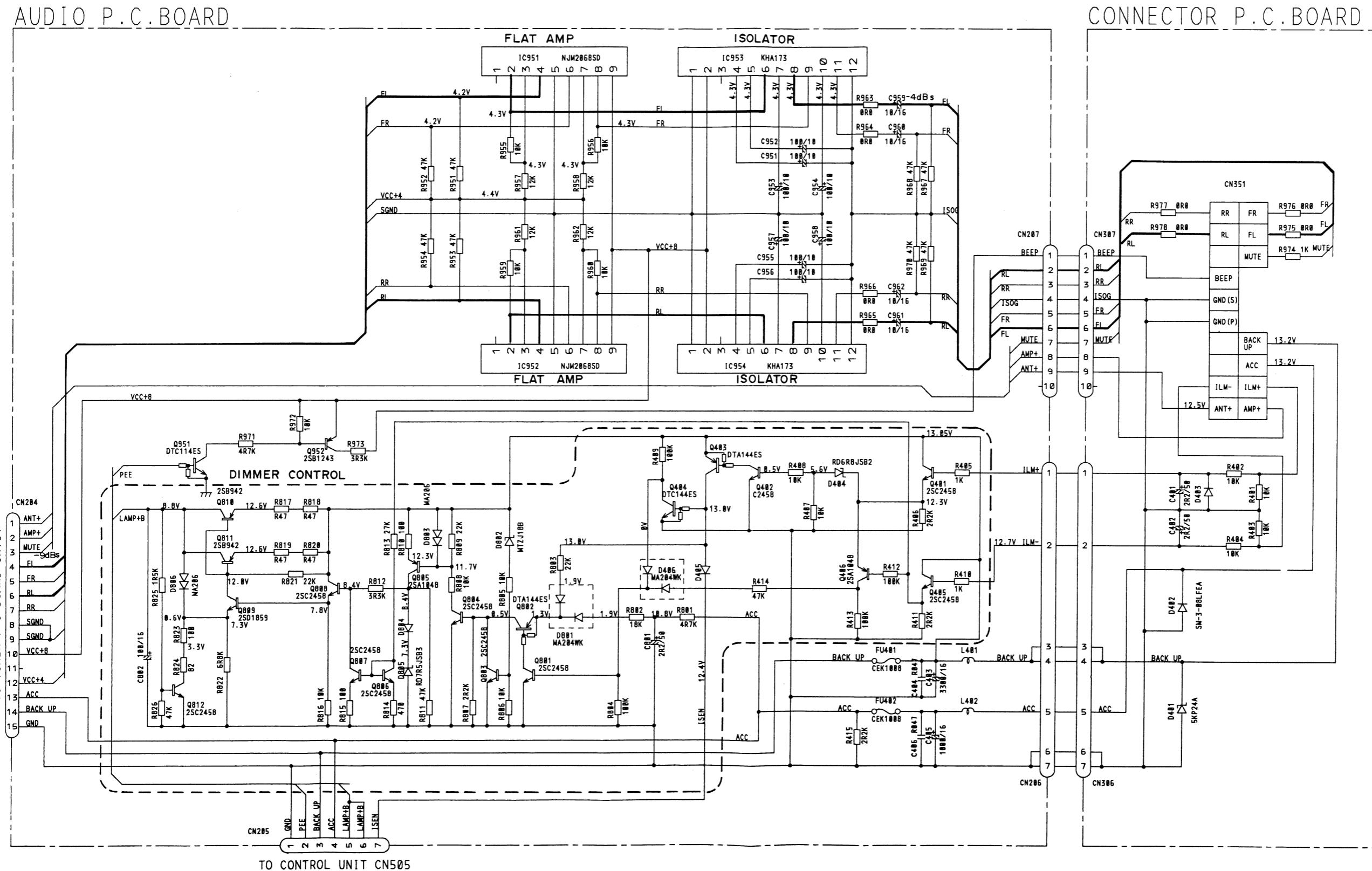


Fig. 22

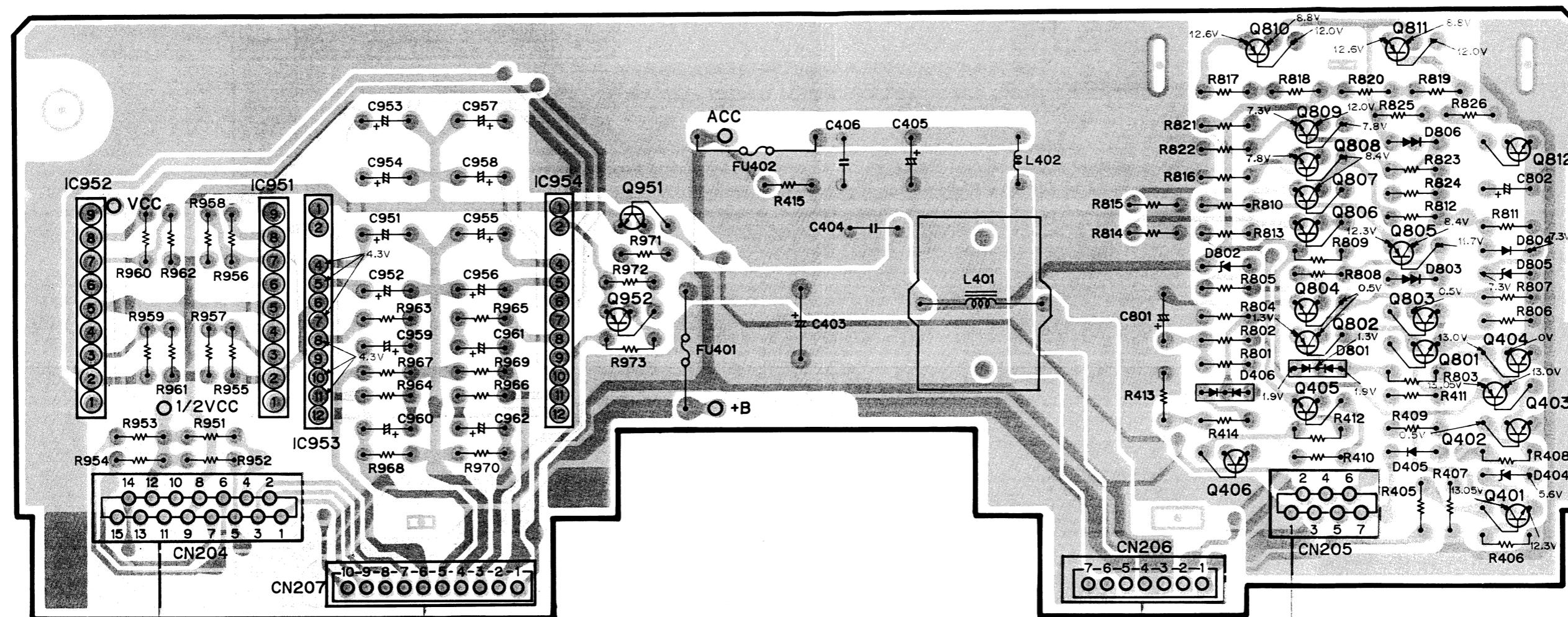
AUDIO P.C. BOARD

IC, Q IC952

IC951 IC953

IC954 Q951
Q952Q809 Q811 Q812
Q804 Q808 Q805 Q404
Q802 Q807 Q803 Q402
Q406 Q810 Q405 Q806 Q801 Q403 Q401

A



CONNECTOR P.C. BOARD

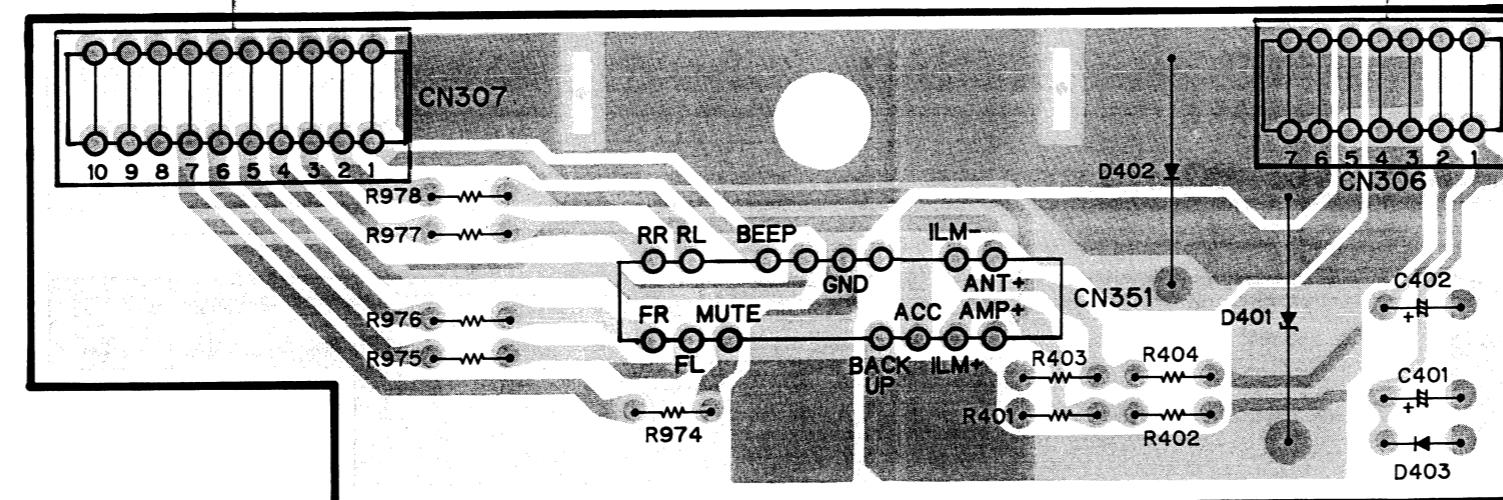
TO TUNER P.C. BOARD
CN104TO CONTROL UNIT
CN505

Fig. 23

KEY BOARD

9.3 KEY BOARD AND VOLUME P.C. BOARD

IC, Q Q906
Q905 Q904 Q90

IC90

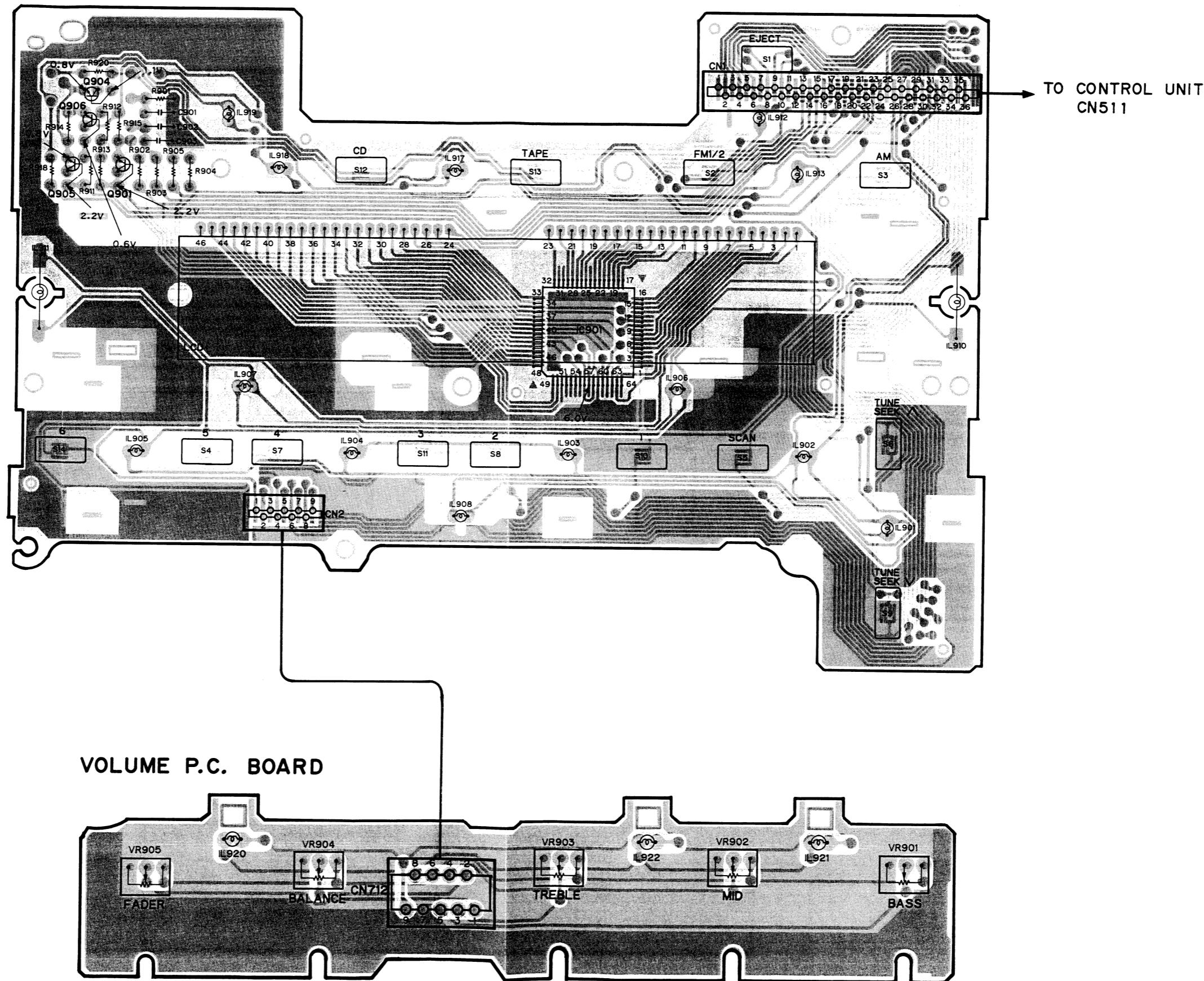


Fig. 24

KEY BOARD

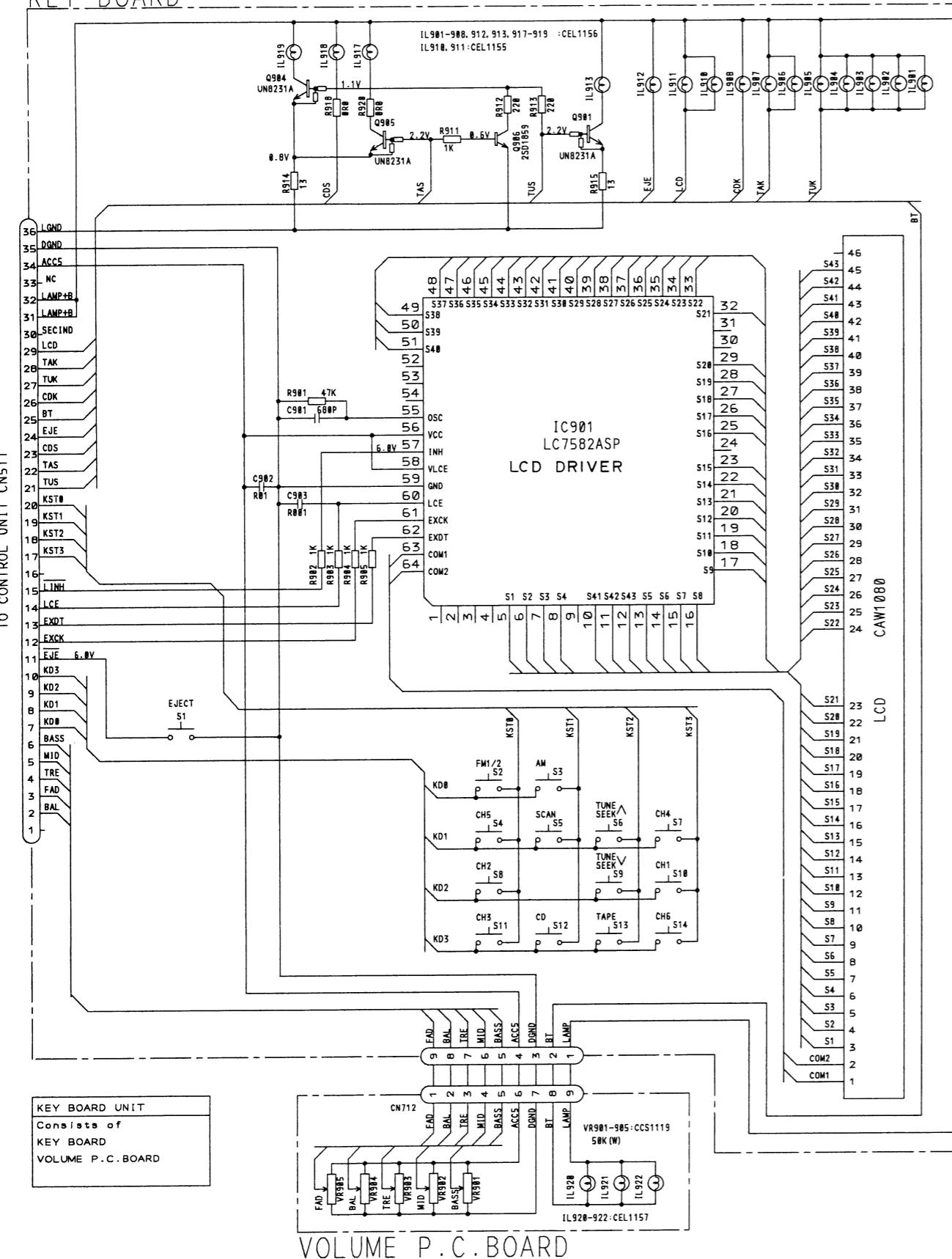


Fig. 25

9.4 FM UNIT

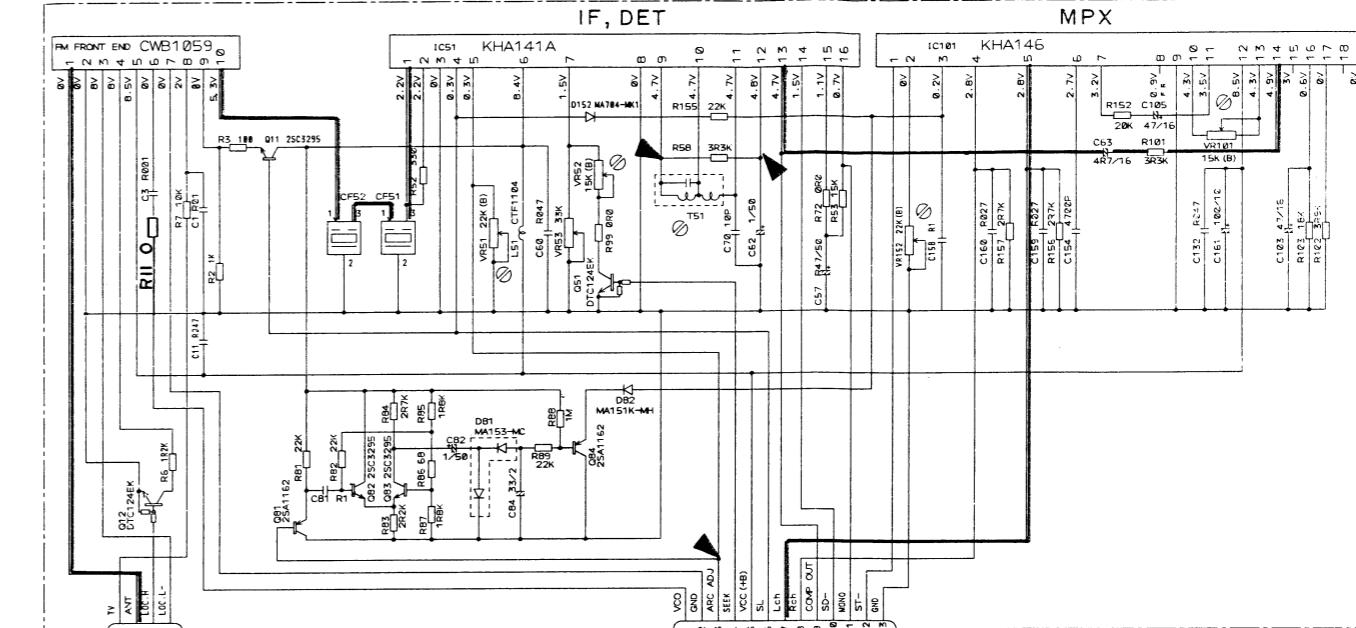


Fig. 26

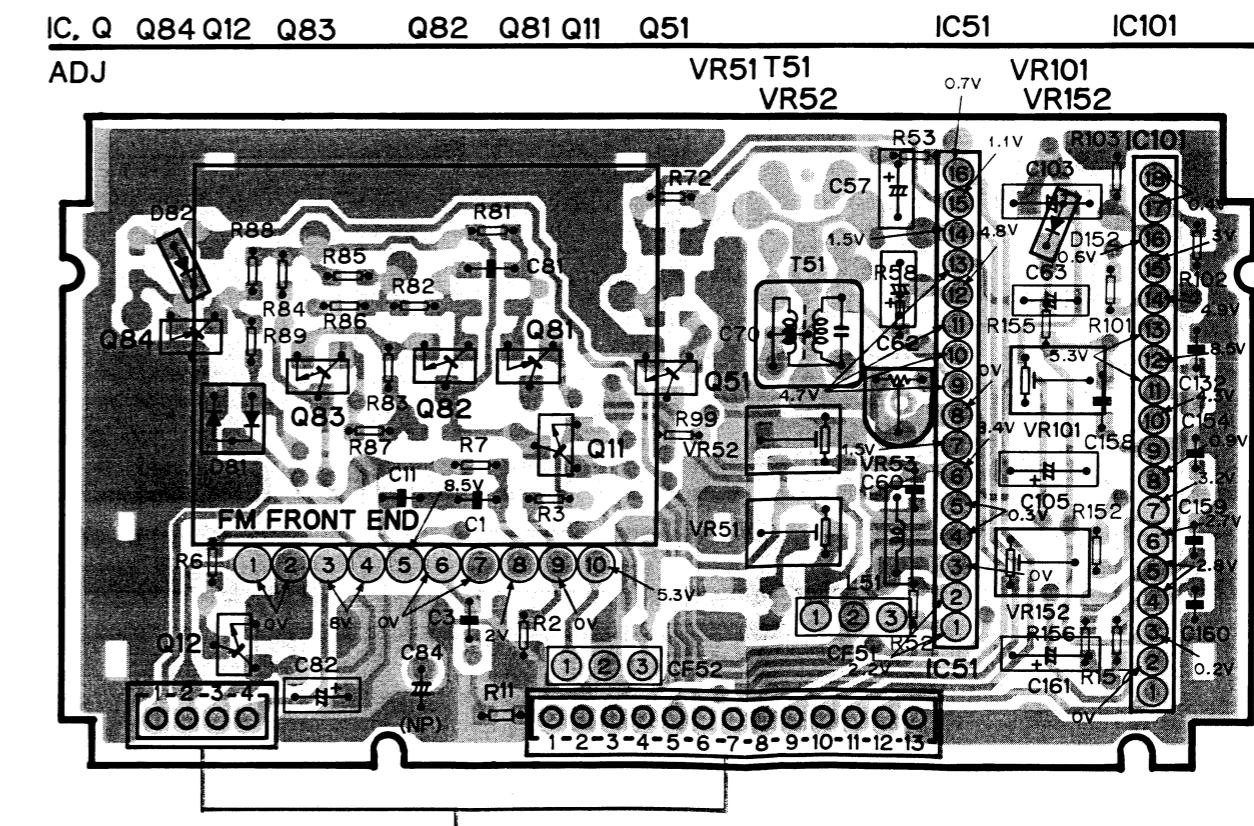


Fig. 27

9.5 CASSETTE MECHANISM ASSY

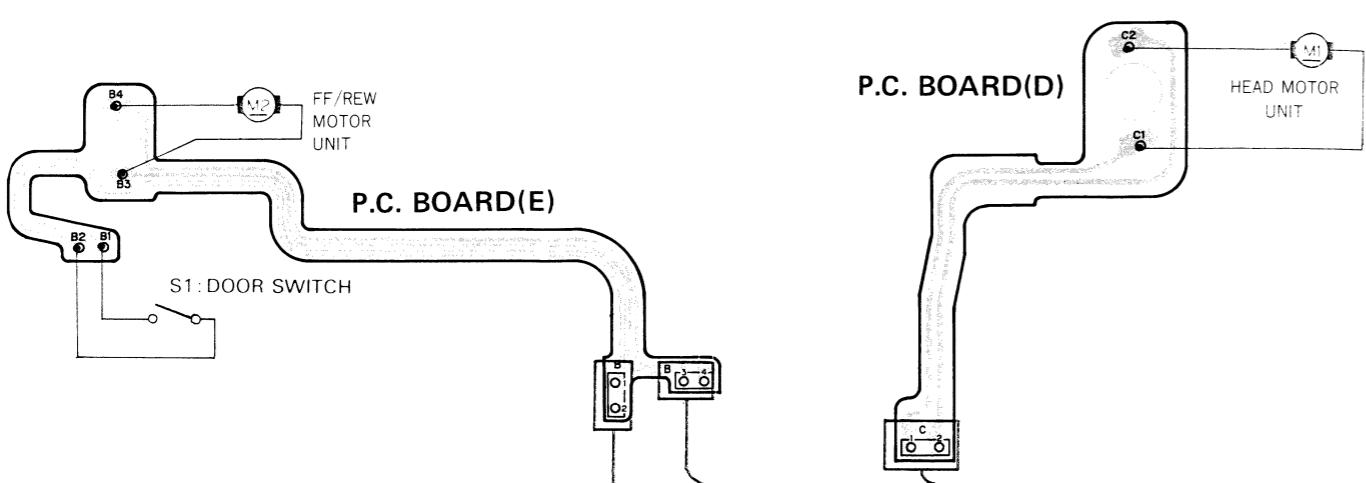
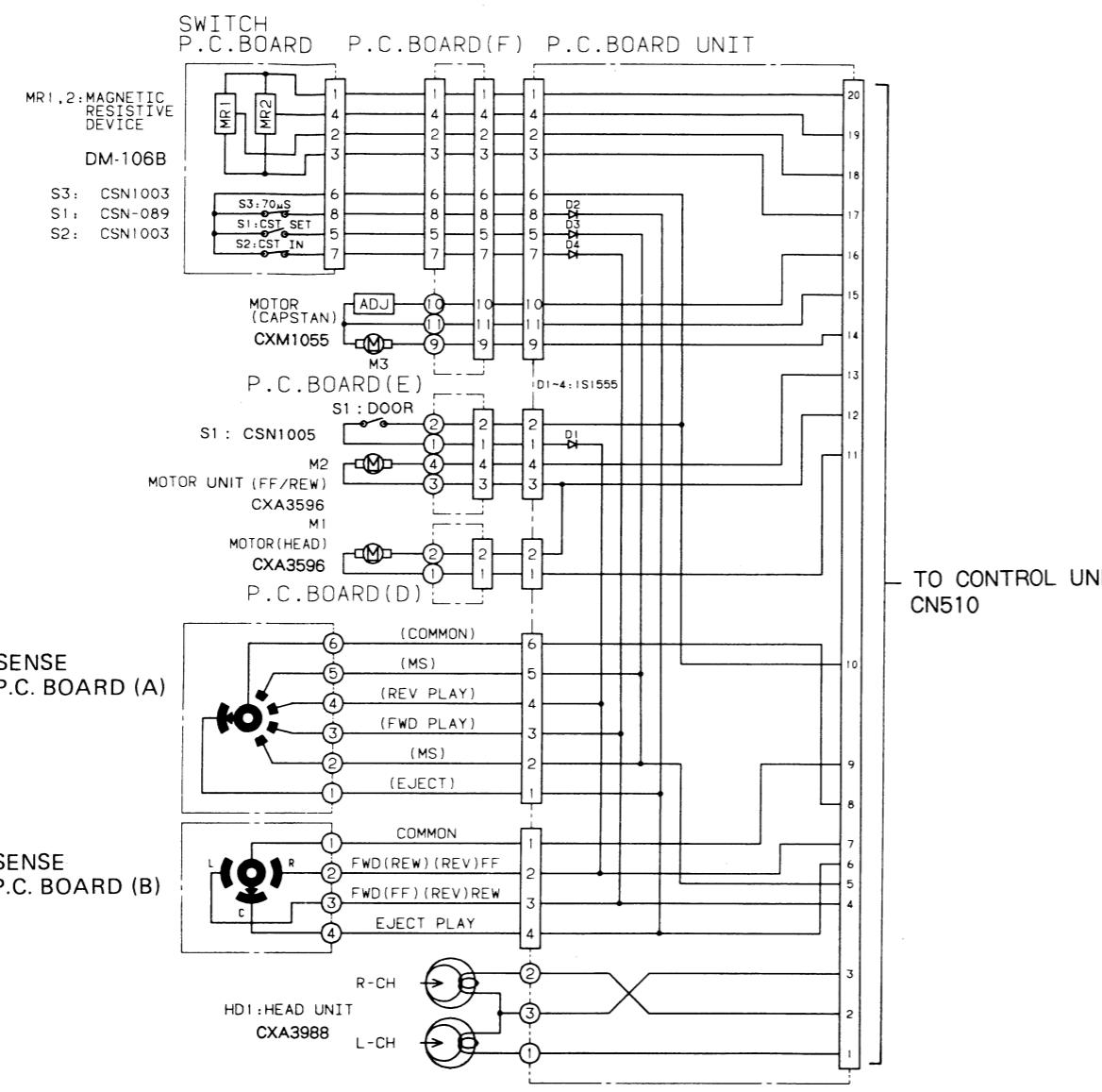


Fig. 28

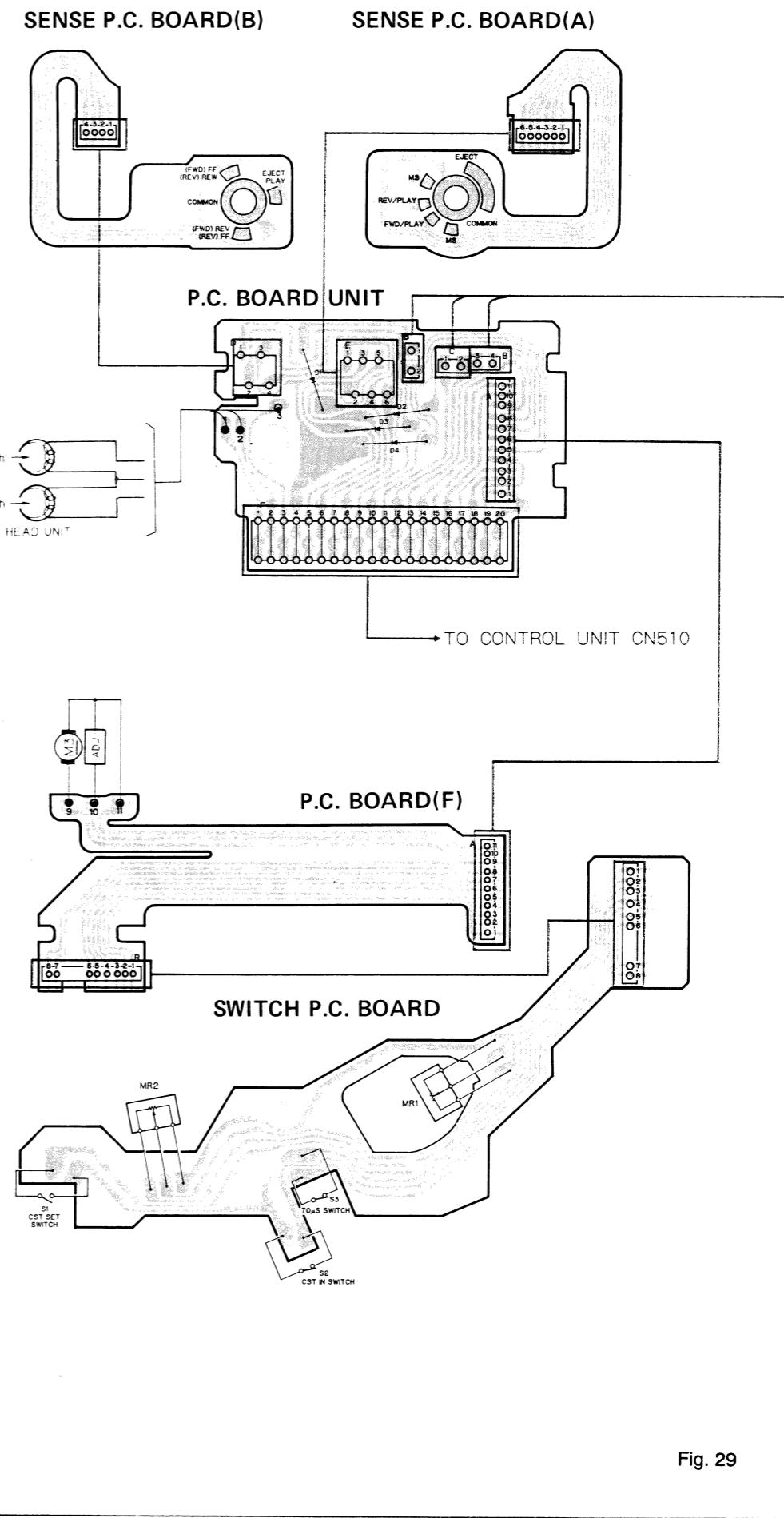


Fig. 29

● Chassis (1)

A

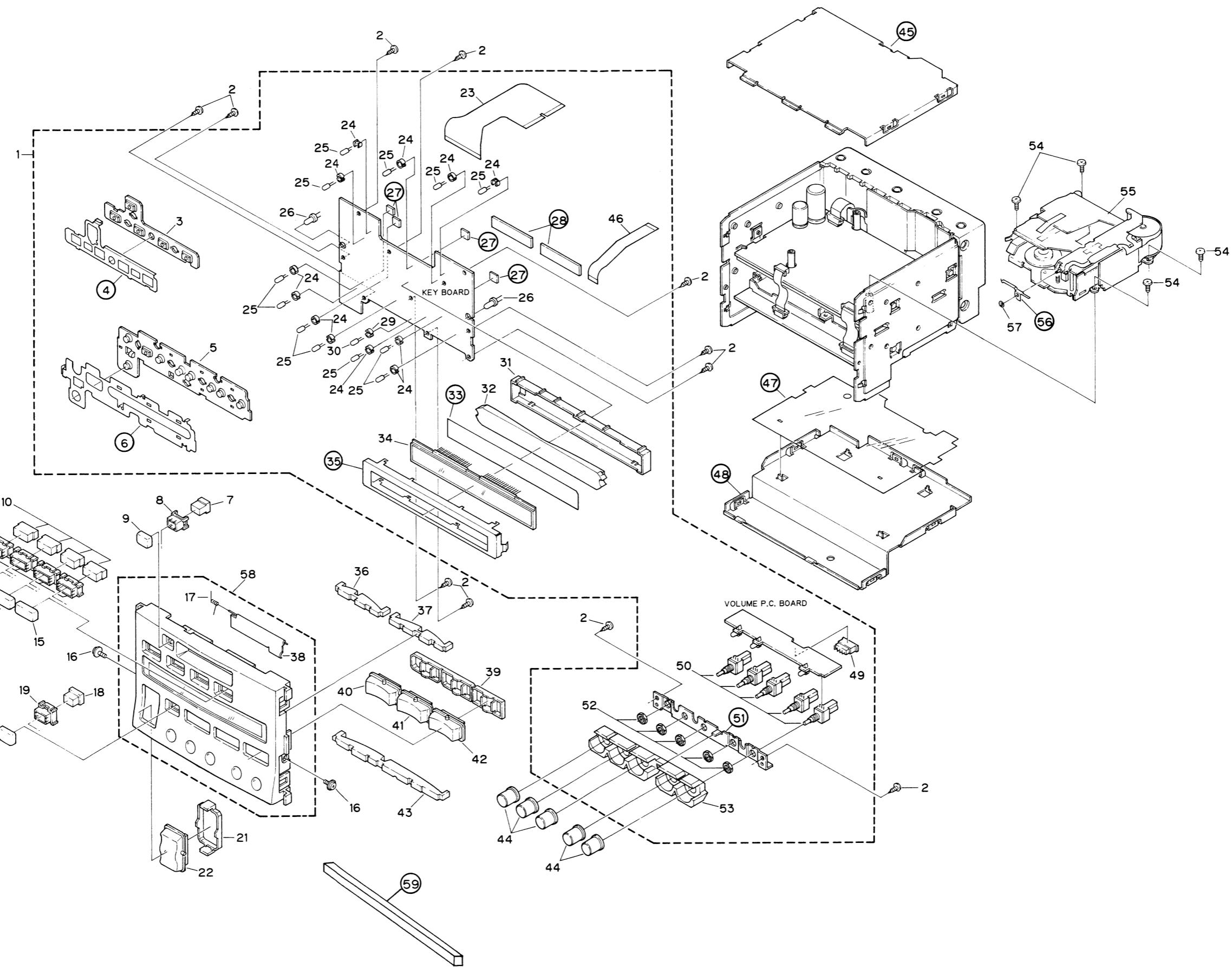


Fig. 32

11. CHASSIS EXPLODED VIEW (2)

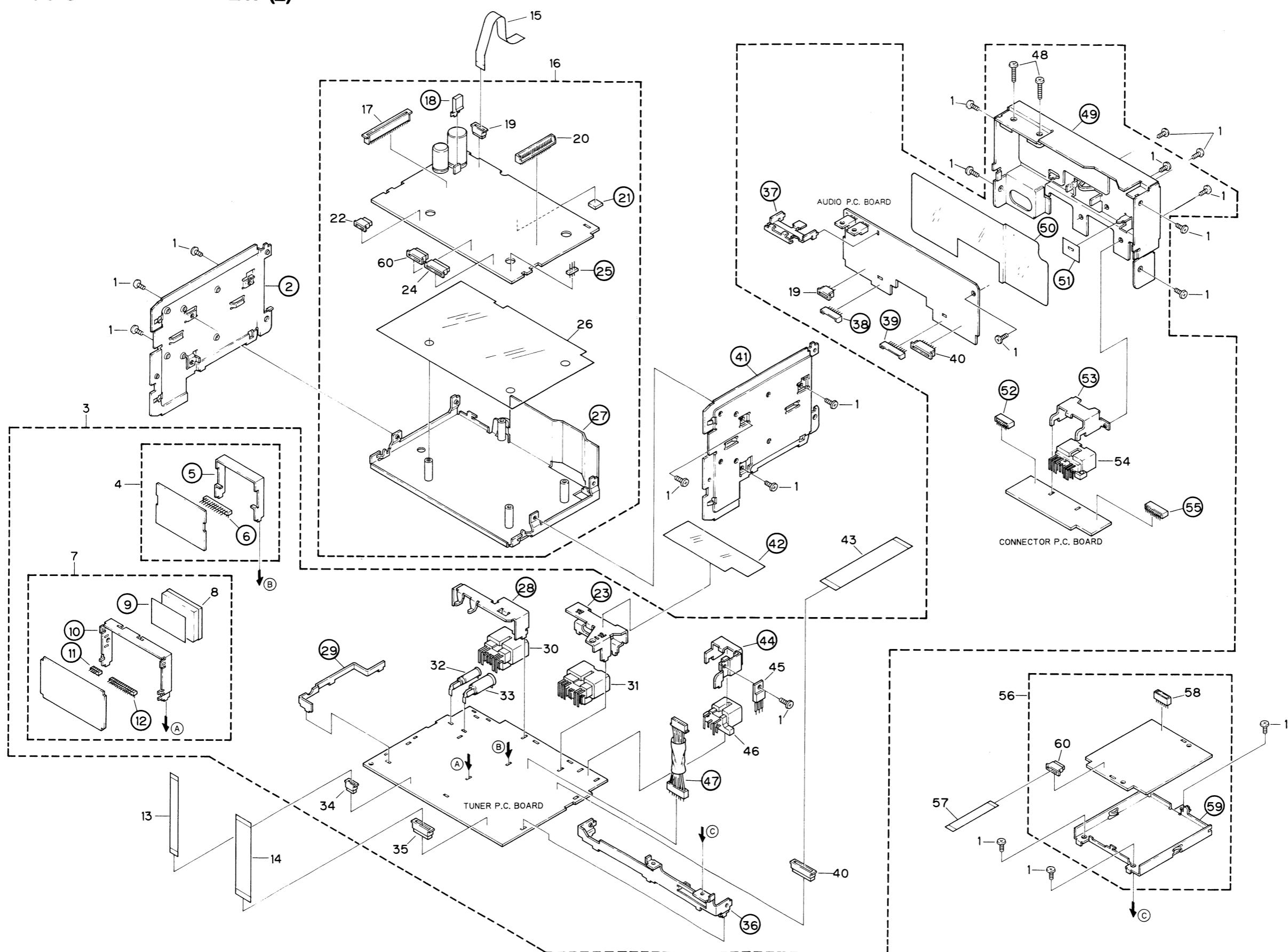


Fig. 33

● Parts List

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BMZ30P060FMC	31	Connector	CKM1065
2	Side Plate	CNB1309	32	Antenna Jack	CKX1005
⑥ 3	Tuner Amp Unit	CWM2037	33	Antenna Jack	CKX1006
⑥ 4	AM Unit	CWA1050	34	Connector	CKS1782
5	Holder	CNC2352	35	Connector	CKS2009
6	Plug	CKF1017	36	Holder	CNC2997
⑥ 7	FM Unit	CWE1212	37	Holder	CNC3136
8	FM Front End	CWB1059	38	Plug	CKS-646
9	Insulator	CNM2842	39	Plug	CKS-649
10	Holder	CNC3414	40	Connector	CKS1785
11	Plug	CKS1614	41	Side Plate	CNB1310
12	Plug	CKS1621	42	Insulator	CNM2621
13	Connector	CDE2664	43	Connector	CDE2778
14	Connector	CDE2665	44	Holder	CNC3106
15	Connector	CDE2667	45	Transistor	2SB942
⑥ 16	Control Unit	CWM2194	46	Connector	CKM1087
17	Connector	CKS1389	47	Connector	CDE2928
18	Holder	CNC2328	48	Screw	BMZ30P140FMC
19	Connector	CKS2008	49	Cover Assy	CXA3266
20	Plug	CKS-659	50	Insulator	CNM2675
21	Spacer	CNM2857	51	Insulator	CNM3066
22	Connector	CKS2010	52	Connector	CKS-665
23	Holder	CNC2998	53	Holder	CNC3137
24	Connector	CKS2013	54	Connector	CKM1074
25	Plug	CKS-291	55	Connector	CKS-668
26	Insulator	CNM2533	⑥ 56	Communication Unit	CWM2038
27	Chassis Assy	CXA3176	57	Connector	CDE2668
28	Holder	CNC3133	58	Plug	CKS1040
29	Earth Plate	CNC3003	59	Case	CNC3002
30	Connector	CKM1064	60	Connector	CKS2011

12. CASSETTE MECHANISM ASSY EXPLODED VIEW

- Parts List

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw (M1. 4×1. 4)	HBA-147	46	Screw	PMS26P025FMC
2	Screw	BMZ20P040FMC	47	Spring	CBH-830
3	Bush	CLB-663	48	Screw (M2×2. 5)	HBA-174
4	Spring	CBE1023	49	Spacer	CNW-945
5	Spring	CBH-867	50	Spring	CBL1050
6	Spring	CBH-837	51	Washer	CBF1025
7	Arm	CNC2373	52	
8	Holder Unit	CXA2821	53	
9	Gear Unit	CXA2088	54	
10	Washer	CBF1026	55	Screw	BMZ20P025FMC
11	Gear	CNY-271	56	Gear	CNV1616
12	Washer	CBF-126	57	Collar	CLA1238
13	Spring	CBH-835	58	Flywheel	CNV1572
14	E Type Washer	CBG1003	59	Belt	CNT1046
15	Spring	CBH1277	60	Insulator	CNM2592
16	Pinch Roller Unit	CXA2608	61	
17	Spring	CBH1197	62	Cover	CNC2829
18	E Type Washer	YE25FUC	63	Screw	BMZ20P030FMC
19	Arm	CNV1254	64	Screw (M1. 7×3)	CBA1125
20	Washer	CBF1022	65	Holder	CNV1252
21	Collar	CNW-932	66	Screw (M2×2.5)	CBA-165
22	Spring	CBH-827	67	Guide Unit	CXA2380
23	Reel Unit	CXA2089	68	Spacer	CNC1651
24	Spring	CBH-868	69	Switch	CSN1005
25	Bracket Unit	CXA1481	70	Motor Unit	CXA3596
				(FF/REW. Head Position)	
26	F/R Gear	CNW-944	71	Screw	HBA-174
27	Screw	CBA1106	72	Bracket Unit	CXA2605
28	Switch (70 μS, CST IN)	CSN1003	73	Pinch Roller Unit	CXA2609
29	Screw (M1. 7×5. 5)	CBA1025	74	Screw (M2×2. 5)	CBA1037
30	P. C. Board	CNP1223	75	Pulley	CNV1255
31	Switch (CST SET)	CSN-089	76	Belt	CNT1047
32	Screw (M1. 7×3)	CBA-186	77	Plate	CNC3632
33	Magnetic Resistive Device	DM-1068	78	Screw	HBA-212
34	Washer	CBF-046	79	Pulley	CNV1256
35	Spring	CBH-887	80	Screw (M2×5)	CBA1054
36	Spring	CBH-886	81	Bracket Unit	CXA2606
37	Gear	CNV1075	82	Cover	CNV1489
38	Screw (M2×5)	CBA1054	83	Screw (M1. 4×8)	CBA1055
39	Arm Unit	CXD-389	84	Spring	CBE-114
40	Arm	CNG-618	85	Azimuth Rubber	CNY-134
41	Washer	HBF-179	86	Head Unit	CXA3988
42	Lever	CNV1257	87	Spring	CBH-829
43	Spring	CBH1196	88	Gear	CNW-939
44	Motor (Capstan)	CXM1055	89	E Type Washer	YE12FUC
45	Chassis Unit	CXA3544	90	Gear	CNV1262

● Cassette Mechanism Assy

Part No.	Description
91 Holder Assy	CXA1546
92 Spring	CBH1276
93 Arm	CNV1495
94 E Type Washer	YE15FUC
95 P.C. Board	CNP1227
96 P.C. Board	CNP1738
97 P.C. Board	CNP1851
98 Connector (6P)	CKS1075
99 Connector (4P)	CKS1073
100	
101 Arm	CNH-004
102 Holder Assy	CXA1548
103 Screw (M2×2)	HBA-209
104 Connector (20P)	CKS-678
105 Screw (M2×2×3)	CBA1022
106 Diode	IS1555
107 P.C. Board	CNP1737
108 Arm	CNV1253
109 Screw (M2×7)	CBA1060
110 Screw (M2×4)	CBA1015
111 Screw (M2×2.5)	CBA1041

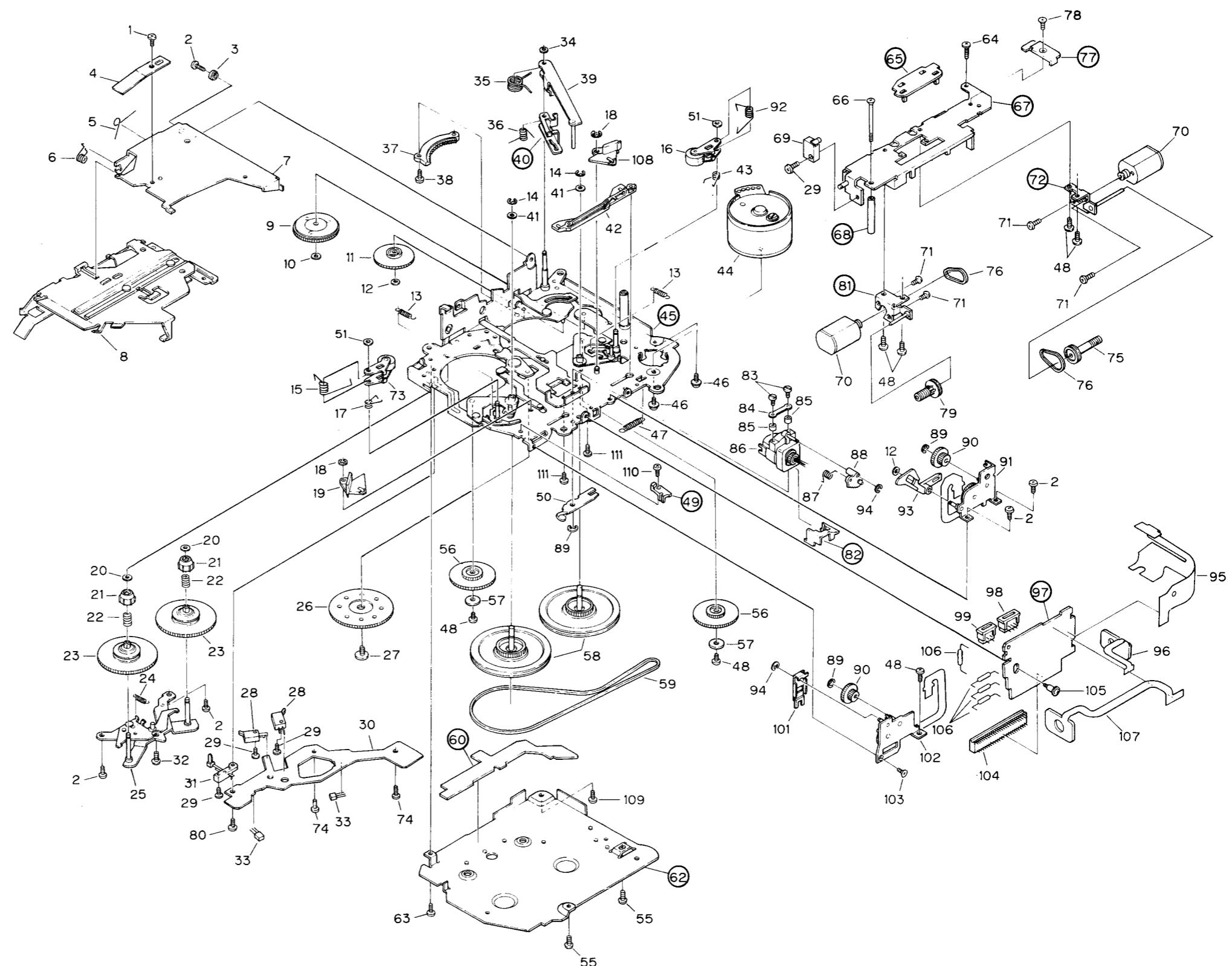


Fig. 34

Mark	Circuit Symbol & No.				Part Name	Part No.	Mark	Circuit Symbol & No.				Part Name	Part No.		
L 602	Ferri-inductor				LAU150K		C 611	612				CCSOCH330J50			
IB 601	602	603			CWW1240		C 614					CASA010M25			
IB 604	605				CWW1233		C 615	852				CKSQYB102K50			
IB 606					CWW1153		C 618					CCSOCH101J50			
IB 607					CWW1126		C 619	620	622	623		CKSQYB103K50			
IB 608					CWW1298		C 706	4700 μ F/16V				CCH1061			
X 601	Crystal Resonator				CSS1029		C 711	2200 μ F/16V				CCH1001			
VR 301	302	Semi-fixed 10k Ω (B)				VRTB6VS103		C 712				CASA010M25			
RESISTORS															
Mark	Circuit Symbol & No.				Part Name	Part No.		Key Board Unit							
								Consists of							
								• Key Board							
								• Volume P.C. Board							
								Unit Number :							
								Unit Name : Key Board Unit							
								MISCELLANEOUS							
Mark	Circuit Symbol & No.				Part Name	Part No.		Mark				Part No.			
R 301	302	305	306	615	621	622	636	637	RS1/10S473J			LC7582ASP			
R 303	304								RS1/10S272J			UN8231A			
R 307									RD1/4PS102JL			2SD1859			
R 308									RS1/10S104J			CEL1156			
R 601	602	603	604	605	606	620	628	630	634	RD1/4PS102JL			CEL1155		
R 613									RD1/4PS223JL			CEL1157			
R 614	652								RD1/4PS473JL			CCS1119			
R 616	617	618	619						RS1/10S102J			CAW1080			
R 623	624	625							RS1/10S471J						
R 626	666	667	668	703					RD1/4PS471JL						
R 627									RS1/10S105J						
R 629	653	654	669	670	671	672			RD1/4PS222JL						
R 632	639	657	658	665	673	704	705	707	RS1/10S104J						
R 635	678	679	682	702	854				RD1/4PS103JL						
R 638									RD1/4PS104JL						
R 651	663	664	706	708					RS1/10S473J						
R 655	656	659	660	661	662	681	853		RD1/4PS102JL						
R 674	675	676	677	851					RD1/4PS222JL						
R 680									RD1/4PS272JL						
R 701									RN1/2P6R8JL						
R 710									RS1/10S333J						
R 711									RS1/10S223J						
R 852									RS1P101JL						
R 855									RD1/4PS221JL						
R 856	865	866							RD1/4PS130JL						
R 857	858								RD1/4PS9R1JL						
R 859	860	861	862	863					RD1/4PS8R2JL						
R 864									RD1/4PS6R8JL						
CAPACITORS															
Mark	Circuit Symbol & No.				Part Name	Part No.		Mark				Part No.			
C 301	302							C 901				CKPYB681K50L			
C 303	304	617						C 902				CKPYY103M16L			
C 305	306	701						C 903				CKPYB102K50L			
C 307	308							Unit Number :							
C 309	310							Unit Name : AM Unit							
C 311	313	707						MISCELLANEOUS							
C 312								Mark				Part No.			
C 314															
C 601	602							C 901				KHA507A			
C 603								C 902				LA1136H			
C 604	605	613	616	709	714	716	851					2SK435			
C 606	609	708	717					C 903				2SC2458			
C 607								IC 201				KV1280F1-2			
C 608								IC 202				ISS133			
C 610								IC 203				CTF-185			
								L 201				LAU680K			
								L 202				Ferrri-Inductor			
								L 203				Ferrri-Inductor			
								T 201				Coil			
												CTB1051			

Unit Number :
Unit Name : Switch P.C. Board

Mark	Circuit Symbol & No.			Part Name	Part No.
S	1			Switch(CST SET)	CSN-089
S	2	3		Switch(CST IN.METAL)	CSN1003
MR	1	2		Magnetic Resistive Device	DM-1068

Miscellaneous Parts List

Mark	Circuit Symbol & No.			Part Name	Part No.
M	1	2		Motor Unit(Head, FF/REW)	CXA3596
M	3			Motor(Capstan)	CXM1055
HD	1			Head Unit	CXA3988
S	1			Switch(Door)	CSN1005

9.6 AM UNIT

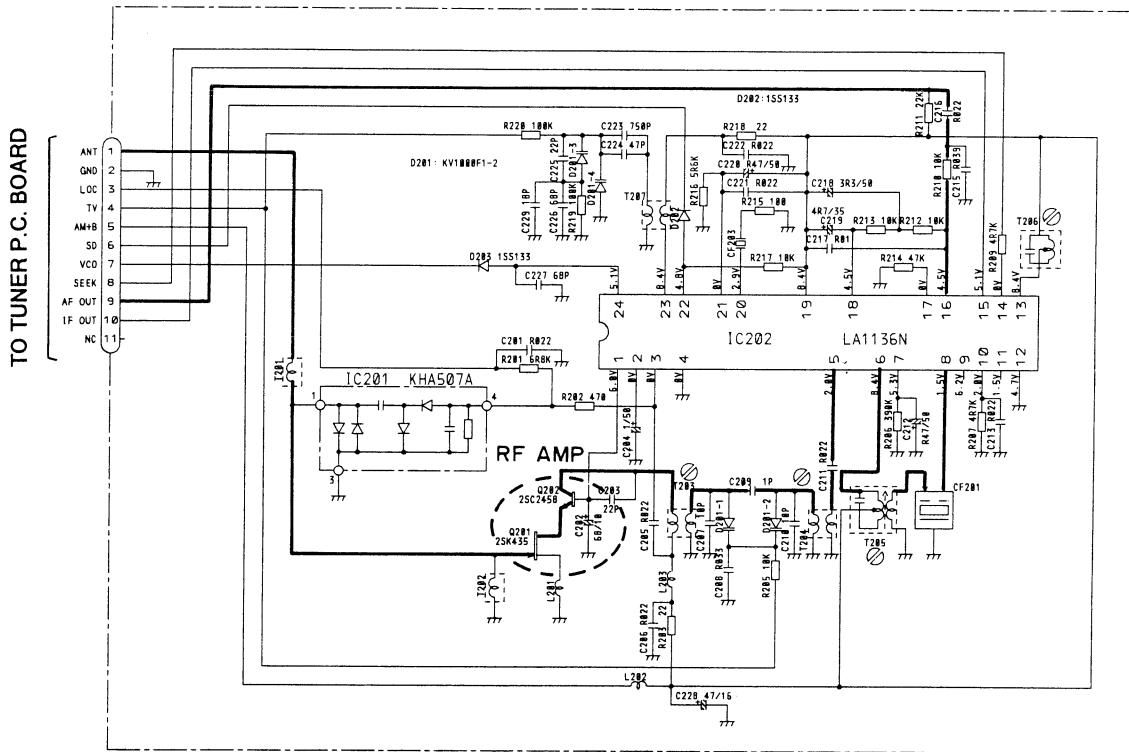


Fig. 30

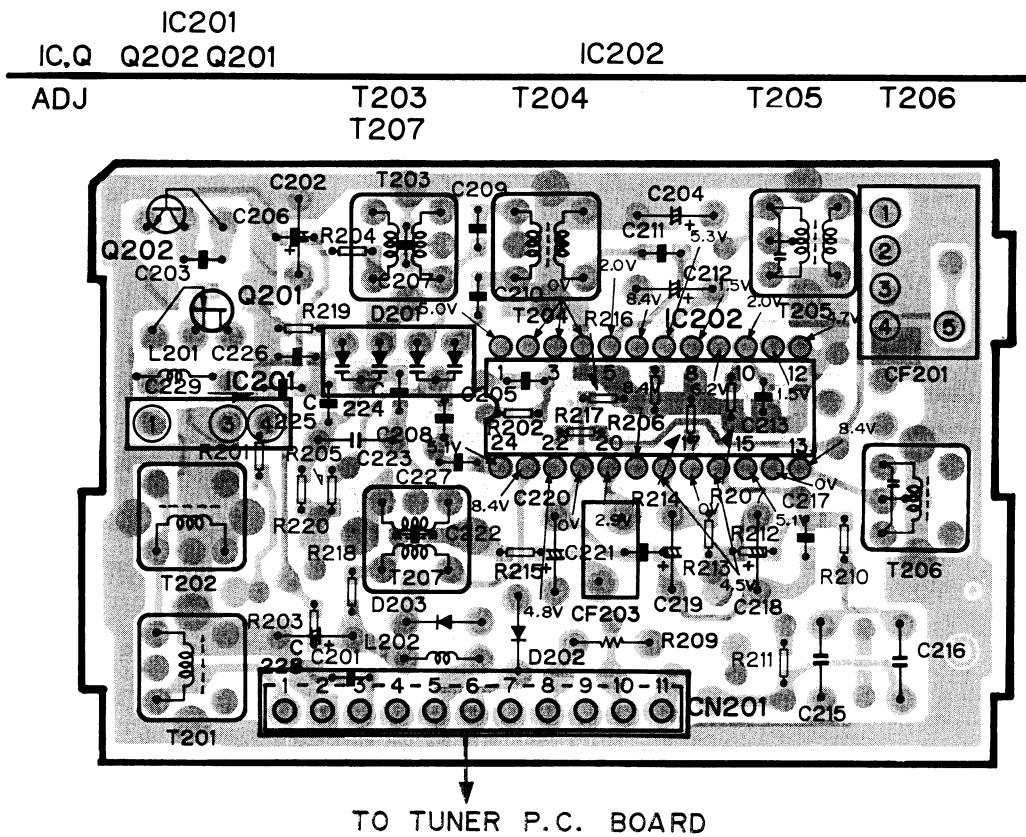


Fig. 31

10. CHASSIS EXPLODED VIEW (1)

NOTE:

- The parts marked with “◎” may need long time to supply and their supply is subject to refuse as the case may be.
- Because the parts with encircled number shown on the dismantling drawing are not spare parts, we are unable to supply them in principle.

● Parts List

Mark No.	Description	Part No.	Mark No.	Description	Part No.
◎ 1	Key Board Unit	CWS1151	31	Holder	CNV2327
2	Screw	CBA1161	32	Lens	CNV2833
3	Rubber	CNV2337	33	Plate	CNM2530
4	Conductor	CNC2994	34	LCD	CAW1080
5	Rubber	CNV2338	35	Holder	CNC2992
6	Conductor	CNC2995	36	Lens	CNV2329
7	Lens	CNV2335	37	Lens	CNV2330
8	Holder	CNV2324	38	Door	CAT1295
9	Button (EJECT)	CAC2310	39	Holder	CNV2321
10	Lens	CNV2333	40	Button (1, 2)	CAC2307
11	Holder	CNV2320	41	Button (3, 4)	CAC2308
12	Button (AM)	CAC2303	42	Button (5, 6)	CAC2309
13	Button (FM1/2)	CAC2304	43	Lens	CNV2331
14	Button (TAPE)	CAC2305	44	Knob	CAA1237
15	Button (CD)	CAC2306	45	Case	CNB1307
16	Screw	PMS30P040FMC	46	P. C. Board	CNP2274
17	Spring	CBH1214	47	Insulator	CNM2532
18	Lens	CNV2336	48	Case	CNB1308
19	Holder	CNV2325	49	Connector	CKS2012
20	Button (SCAN)	CAC2311	50	Volume	CCS1119
21	Holder	CNV2326	51	Holder	CNC2993
22	Button (SEEK TUNE)	CAC2312	52	Nut	CBA-066
23	P. C. Board	CNP2273	53	Lens Assy	CXA4208
24	Holder	CNV1906	54	Screw	BMZ26P050FMC
25	Lamp	CEL1156	◎ 55	Cassette Mechanism Assy	CXK1687
26	Lamp	CEL1155	56	Arm	CNC1280
27	Spacer	CNM2448	57	Washer	CBF-046
28	Cushion	CNM2856	58	Grille Unit	CXA3175
29	Holder	CNV1906	59	Cushion	CNM3138
30	Lamp	CEL1156			